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### Evening Meeting.

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Monday, February 11th, 1867.

CAPTAIN E. GARDINER FISHBOURNE, R.N., C.B., Vice-President,  
in the Chair.

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#### ON MANNING THE NAVY.

By JAMES REDDIE, Esq., Accountant-General's Department, Admiralty.

THE Manning of the Navy is a subject which has occupied too much of the attention of the Government during the last twelve years, and has been too often discussed in Parliament and by the press, to render it probable that its importance can now be under-estimated. But even were that possible elsewhere, at any rate in this Institution, where naval and military men "do mostly congregate," expressly in order to advance the best interests of both services, it is certain to be fully appreciated. A cognate matter, and one which can scarcely be regarded as of less importance, the recruiting of the Army, has lately occupied your attention here. There was no discussion upon that occasion; but as there are certain general principles which must govern the regulations established for securing the best seamen for the Navy, that will be found equally applicable for supplying the Army with soldiers, in some respects the discussion this evening may embrace the *personnel* of both services. What is wisely determined as regards the one, can scarcely fail to afford some key towards solving difficulties as regards the other; and it might be well in the present day, if we were to revert more thoroughly to what used to be considered a principle as regards these two great branches of Her Majesty's Service, namely, to regulate their pay and privileges, always with special reference to one another. However different may be the professions of soldiers and sailors, they are still equally alike in the service of the Country and the Crown, and are equally considered worthy of all their well-earned honours by their civilian fellow-citizens. This consideration enhances the importance of our subject. It makes me also all the more sensible of my need of your kind indulgence while thus venturing to bring it before you, and

it enables me to hope so much from the discussion that will follow, that I may venture to anticipate that that at least may be one merit of this paper.

But, it may naturally be asked, Why, after all that has been said and done of late years with reference to the manning of the Navy, is it now necessary to revert to the subject? Has the problem not been solved already satisfactorily? What more can we now want? Well, Sir, admitting the negative force of these interrogations; admitting that what they imply is to a great extent really true; admitting that much has been done, and well done, for the fleet; and that the naval strength of the country is in such a condition of efficiency, that if it cannot be described as quite perfect, it may be considered as very nearly so; for I believe it may well bear comparison with what it has ever previously been in any time of peace.

The present strength and efficiency, however, of the Royal Navy of England affords one of the best reasons that could possibly be urged for bringing the matter under consideration now, whether in this Institution or in Parliament, and makes the present the very best time for gravely discussing the whole subject.

This question has been hitherto too often left for consideration till matters were far from satisfactory; and new measures have consequently been hastily adopted, sometimes, as it were, under panic, to be almost as rashly abandoned when the immediate danger that suggested them has passed. Besides, it does not follow that because we have now an efficiently manned fleet, and a large Naval Reserve such as we never had organised before, that our future prospects are all we might wish, or that nothing requires to be done to insure that our fleet of the future may be equal to all our wants, or that it will continue like what it is now. It will probably not be denied that there are still some acknowledged difficulties to be met, which have either been experienced or which are anticipated, notwithstanding all that has already been done to secure the manning of the fleet, and to render the Royal Navy popular.

Before proceeding further, however, some explanation may be expected as to this, if not optimist view, at any rate very favourable view of the present state of the Navy.

I am quite aware that there has, even recently, been a good deal of what a naval officer has himself described as "the usual naval growling," both as to the want of seamen and as to the quality of those we have got. Only last Saturday we have in the *Saturday Review* "that the man-of-war's man is not so valuable an instrument as once he was, is the general complaint of naval officers." But then, I must be forgiven for saying, this is really a very old story. In reading through the blue books of the Manning Committee of 1852, and of the Manning Commission of 1859, and taking the evidence exclusively of naval officers on this point, there are two things which have been over-abundantly proved, namely, first that the Royal Navy of England has always been *going from bad to worse*, or "deteriorating," ever since the oldest Admiral now living was born; and secondly, if these opinions were worth anything, that it must actually have *gone to the very worst*



several times since then! But one may well be sceptical as to both these propositions; because, while we find there are opinions of this hopeless kind in great abundance, there are also equally good opinions on the other side, with not a few actual facts in confirmation of the latter. Even the *Saturday Review* adds the consolation, "that this complaint has often been made before, and has always been disproved at a great emergency under great Admirals."

From the evidence of Sir Byam Martin, when Admiral of the Fleet, before the Manning Committee of 1852,\* it will be found that then the only hope of the Navy was considered to be "impressment," though some little was also expected from "liberal bounties." But we know what was all we got when we reverted to the bounty system, seven years after Sir Byam Martin gave his evidence; and it scarcely need now be argued that impressment, with all its old brutalities and injustices, or indeed almost in any form we can imagine, is entirely out of the question for the future. If, then, we hear that now we cannot get volunteers for the Navy; well, you will find in the Appendix to the report of the Royal Commission of 1859 (p. 392), that the year 1778 was considered as "an interesting period," because then the endeavours to obtain volunteers for the Navy "were unsuccessful." And this is just the cry of some alarmists at the present day. But, in fact, I have heard the same cry from time to time during the whole six-and-twenty years I have been connected with the Naval department. Now, although the bounty men of 1859 have been very well abused, as in round terms mostly "land-lubbers and blackguards," the question might be put to any experienced sailor or sensible civilian, Whether it is likely, in the nature of things, that seamen raised by impressment, whether now or eighty years ago, could possibly be any better than the bounty men of 1859? Strong expressions to describe our Navy, whether of the past or present, to praise or censure roundly, are simply natural, if not always wise. We are all too apt at times to think and say "the former days were better than these," and so we need not be surprised to hear the *laudator temporis acti* express himself thus of the Navy.† But with a fleet now, during peace, which numbers about as many men as we had throughout the Russian war ten years ago, surely we ought not to think ourselves very badly off, more especially as at the present time the waste or loss to the service, from deaths, invalidings, desertions, and other casualties, is happily at a minimum.

I will only further premise, that although it is my business to have a good deal to do with statistics relating to the Navy, I do not intend to trouble you much with statistics. There is a table, however, in the Manning Commission's Blue-book, which I think it will be advantageous

\* Blue-book. Parliamentary Paper No. 45, sess. 2, of 1859.

† I may also observe that Admiral Sir Thomas Pasley, the Commander-in-Chief at Portsmouth, is reported in *The Times* of 2nd February as saying, that "we have at this instant as fine a body of seamen in the service as England ever possessed." In an important pamphlet also, on *The Naval Expenditure from 1860 to 1866 and its Results*, published last week, we have the present highly improved discipline and efficiency of the seamen of the fleet recognised.—J. R.

to have, with some additions, upon record in the valuable *Journal* of this Institution. It gives the numbers of seamen, marines, and boys, voted and borne in each year in the Royal Navy from 1756 to 1857, and also the numbers in the registered vessels of the mercantile marine for nearly the same period. I have completed that table as far as possible up to the present date, and shall append it to this paper. On the walls are also a few of the salient figures to be found in that table, and referred to in this paper, which may be useful as we proceed to discuss the question.

For the sake of distinctness, the subject of manning the Navy may be considered under three primary divisions, viz. :—

1. The boys training ;
2. The men serving ;
3. The men reserved for service.

A further sub-division, however, may be convenient in discussion, namely :—

1. Our standing, or minimum force ;
2. Our contingent, or variable force ; and
3. Our reserves.

There is also

4. Our war levies ;

but that must be excluded at present almost entirely from consideration.

There is one other most important point which must not be overlooked, and which must be almost regarded as a major proposition affecting the whole question, and that is *the expense of the system*. It ought to be an essential consideration throughout, that whatever is done must be well done ; and that the only system we can rationally advocate, whether as statesmen, naval officers, or civilians connected with the service, must be that which is best for the safety of the country, and therefore for the efficiency of the service. But that being taken for granted, surely the paramount consideration must afterwards be economy as to the expense.

No doubt all the money that is required for the Navy will be willingly granted by Parliament and the country, but that must be so large a sum that no waste or unnecessary expense will be or ought to be tolerated. I must make one other observation upon this latter point ; for I have heard it said over and over, and, in fact, it has become a hackneyed expression, that the country will grudge nothing for the Navy, and that any amount of money which may be asked for, will be readily granted by Parliament. Now those who employ this language must be reminded, that when it was first made use of by some of the leading newspapers, the fleet was nothing like what it is at present ; and it will not do to go on repeating this remark, after all that has been done for the Navy, as if there could really be no limit to what Parliament could or would vote for the naval service.

Moreover, we may be sure that no newspaper-writer ever made use of such language, without virtually and in intention limiting it in this

sense. It was never intended to be argued that a single penny should be wilfully or unwisely squandered, however much might be freely given to make experiments, when the full results of such experiments were not or could not be previously known. The pamphlet already referred to must convince those who have thought otherwise; and therefore it must be kept in mind that economy must never be disregarded in settling questions like the present. We ought, unquestionably, to have absolutely the *best system* that can be devised; but we cannot possibly have the best system, for that must be one that will last, unless we have a due regard to economy during peace, as well as to efficiency at all times, and especially when war is proclaimed.

The chief object, then, of this paper is to advocate such a system of manning the Navy as will be most effective, and work most satisfactorily during peace as well as during war. Even periodical difficulties or anxieties as to getting men are very undesirable, although in the event they have hitherto always been surmounted. But after efficiency and sufficiency, I have had regard to economy. And I have aimed at dealing with the system generally, and with what we may call principles rather than with points of detail, thus getting rid of many controvertible points. For instance, some may say that now we have a difficulty in getting men in the Navy as well as in merchant ships. Perhaps the only difficulty in the Navy is to get them quite easily and with sufficient rapidity. But, be that as it may, what I advocate, is intended to get over all such difficulties; and even if they do not exist at present, I beg still to claim your attention on other grounds, and in order that such difficulties may never exist. But I wish to deal with broad principles and the general features of the system, and not with details. Because, if the existing system is all that it ought to be, and yet the Navy is temporarily in want of seamen, there is scarcely a question for the members of an Institution like this to consider, but only one for the executive Government and the Admiralty.

I shall also exclude, or will notice only incidentally, questions of discipline and ship-board arrangements, as not coming properly within the range of one who is chiefly conversant with the civil affairs of the Navy, the numbers of its men, and its annual cost. Not to appear, however, to wish to shirk such questions, I had here intended to quote a statement of some of the "grievances" which are alleged to be even now felt by men-of-war's men, upon which I should have made some brief comments, chiefly to shew their groundlessness. The recent pamphlet on *Naval Expenditure* renders this superfluous, so I shall pass on to other matters.

Excluding, however, all such points, and many more, the question is still large enough. So much is already in print on the subject, in the Report of the Committee of 1852, and the Royal Commission's Blue-book of 1859, in the Report of Lord Derby's Confidential Committee on "The Navies of England and France," and in various pamphlets, some by distinguished naval officers, and others anonymously written, that I am driven, in very despair of being able to quote all that might be confirmatory of my views, to dispense with quotation almost altogether,

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relying upon the merits of what is now proposed, and trusting to your knowledge of the whole bearings of the question.

Let us now glance at the present numbers of seamen, marines, and boys in the Royal Navy. For the current financial year, which will end on 31st March next, a vote was taken for no less than 67,850 persons. Of these, 44,114 were seamen, 7,336 boys, and 16,400 marines. The average numbers borne or actually serving in the year have not yet been struck; but I may say they were no doubt within 500 or 600 of the numbers voted, *i.e.*, upwards of 67,000 persons. And in 1865-66, that is the last financial year, there were 67,890 persons on an average serving, or almost the precise numbers voted by Parliament for the present year. We may, perhaps, also venture to surmise that the numbers that will be voted for the following year, to commence on 1st April next, will not materially differ from these figures.

Well, then, it will best enable you to appreciate what a grand peace establishment these numbers represent, if you consider that the average number borne between 1st April, 1854, and 31st March, 1857, was 63,000, and that in the year 1855-56, during the height of the war with Russia, the average numbers borne were only 67,791, or somewhat fewer than were serving last year. But that is not all. From 1854 to 1857 we had no Royal Naval Reserve; while last year that body numbered between 16,000 and 17,000 seamen, in addition to the 67,890 seamen, marines, and boys serving in the Fleet and Coast Guard; and, in reckoning the Coast Guard men, are *not* included the civilians of that force on shore.

If we go more minutely into these figures, the state of things is still more satisfactory as regards the present actual strength of the Navy. All who have studied this question know, that our difficulties, when they have existed, have not been as regards marines or boys, but as regards our seamen. Well, in 1855-56 the seamen voted were only 44,000, as against upwards of 44,000 voted both for last year and this. And again, these 44,000 seamen, we now have during peace, are exclusive of our new reserves of 16,000 or 17,000 men, of whom several thousands would be available for manning the fleet within a few months, *if* war were proclaimed.

Let us take another period for comparison, with our present large force during peace. In 1859-60 only 72,400 persons were voted, when bounty was reverted to, after a long interval, to increase the fleet by 10,000 suddenly. Even including the 6,700 representing seamen out of that 10,000, the total of the seamen voted was only 47,066, though then we had no Naval Reserve. Even next year (1860-61), when the total vote was 84,000, though only 79,000 were borne, the vote for seamen alone was only 56,603, as against our present 44,000 and 16,000 or 17,000 reserve men, together equal to upwards of 60,000.

It is unnecessary to occupy your time with a minute comparison of our present numbers with those of any year from 1816 down to the Russian war, in 1854, and including the so-called China war, between 1839 and 1843; because our present vote of 44,000 *seamen alone*, and



exclusive of the Naval Reserve, exceeds or equals all the *seamen, marines and boys*, who were serving in *any* year, from 1816 down to 1853-54, except (to be very particular) in the year 1847-48, when 44,969 persons were serving; but then of these only 27,500 were *seamen*, against our present 44,000.

Let us now analyse still further our present force, especially of *seamen*. What is called our continuous service system, or the making of engagements with *seamen* to serve beyond the commission of a ship (or five years, if required), with additional pay and advantages to continuous service men who so engaged for ten years, or other extended periods, only commenced in 1853, just before the Russian war. It was founded upon a suggestion of Mr. Pennell, then Chief Clerk of the Admiralty, Whitehall, and recommended by Sir Wm. Parker's Committee of 1852. Now a large proportion of our 44,000 *seamen* are continuous service men, and form a "Standing Navy," having a permanent character like the *marines*. The *seamen* of the fleet, however, must still further be divided into *seamen* proper, or pure blue jackets, who go aloft and work the guns, in contradistinction to artificers (as shipwrights, caulkers, plumbers, coopers, blacksmiths, armourers, painters, joiners, tinsmiths), and to stokers, and to others called "idlers" on board ship, including the mess room and officers' servants.

Of these pure blue jackets the present numbers serving are in round figures 22,000, and nearly all of them are continuous service men. They form the petty officers, leading *seamen*, *seamen-gunners*, and the other able and ordinary *seamen* of the Royal Navy, in short they are our fighting men *par excellence*. It is the men of this class who require a regular man-of-war's training, in order to be fully qualified for the service. It is as to the supply of such men alone that there has ever been any great anxiety. It is almost exclusively for the purpose of securing such men that boys have been entered and trained of late years in the Navy. The artificers, stokers, servants, also required afloat, do not require to be trained from boyhood in the fleet; and in fact some of them could not be trained and taught their crafts on board ship.

We are thus brought naturally to the first division of our subject: *The Boys' Training*.—Under this category are included the boys serving in the fleet, as well as those borne specially in the training ships; because in the widest sense, all the boys in the Navy are really training, though of course the majority of them are very properly made use of in sea-going ships while thus "training," or learning to be made sailors. Bearing in mind, then, that the object of having boys in the fleet is in order—as it has been expressed—"to manufacture blue jackets" (for we may disregard the few hundred ships' stewards' boys), the question then is, Have we now a sufficient number of boys in the Navy for this purpose? I think we have; and this may be easily made clear.

In round numbers, the boys voted this year were 7,330. The annual waste from deaths, invalidings, and other ordinary casualties may be



taken at 10 per cent., but it is considerably less. Then  $7,330 - 730 = 6,600$ ; and as these boys enter the Navy upon an average when 15 years old, they will grow into men in three years' time. Then, if we divide this number of 6,600 by 3, we have 2,200 as the annual number of boys that will grow into men, and be rated second-class ordinary seamen. In other words we now grow and train some 2,200 men annually, to keep up our number of blue jackets.

Are, then, 2,200 men enough—that is the next question—to supply the waste among our 22,000 pure blue jackets? Again, I answer, Yes. The waste or annual drain, arising from deaths, desertions, invalidings, and other inevitable casual discharges, (and including discharges by purchase, although they may be controlled,) is at present under 10 per cent. But taking it at that rate for convenience, 2,200 men per annum are exactly the number we require to supply this waste among our men; and the number of boys now voted, as we have seen, will supply that number.

I am quite prepared to show, that this estimate of waste, whether for men or boys, is ample. But it will be evident, that were it a little more or less, that would only be a question of detail requiring a slight modification of the above figures, and need not be a question here. I may observe, however, that this average of "waste" may be regarded as remarkably persistent in the Navy. For when Admiral Sir Alexander Milne gave his evidence before the Manning Commission in 1858 (Q. 99), he gave that same per centage as the waste of our seamen then, probably, however, excluding the discharges by purchase. But, including these, at present it is under 10 per cent. After the bounty in 1859 the waste was certainly greater, but that was under abnormal circumstances.

This brings us now to the second division of our subject:—*The Men Serving*. It might be said,—True, we may have boys enough to keep up the present number of blue jackets; but have you enough of these? Is the present number of seamen sufficient? In order to answer that, we must bear in mind the comparisons already instituted between our present fleet during peace, and our numbers during the Russian war, and again in 1859, when we were preparing for war, in our anxiety to maintain peace. We need scarcely expect to see a larger Navy in this country than we now have, unless when war may be imminent or in anticipation. Nor can we quite appreciate the great advantage of having a Naval Reserve, if it will not enable us to reduce our Navy during peace. With a thoroughly available Naval Reserve, the country will naturally expect that our standing force in future should rather be reduced than increased.

I have ventured to hint at the possibility of a reduction in the fleet, not as now advocating its advisability. This is not the place to do so; and it is evident our standing force must be regulated with reference to political considerations and the actual armaments of other countries, even if we have a good reserve.\* But still we may well refer to these

\* In the pamphlet on *Naval Expenditure*, we must regret to be told, "that all

tables of the increase and reductions in the fleet, and to the lessons they ought to teach us, that we may at least consider *how* a reduction might best be effected were Europe to become less warlike, and a reduction hereafter be determined upon by the Government, or otherwise found necessary. This is a very important consideration with reference to the present branch of our subject—the men now serving in the fleet; but it has a still more important bearing upon that which follows, namely, *The men reserved for service*.

We must not forget the sudden reduction of the fleet in 1857, when 76,000 men and boys were voted by Parliament for the first three months, and only 56,000 for the remaining nine months of the financial year. No one who has studied the subject at all—no one who has merely read the one blue-book of the Manning Commission of 1859—is likely to forget that 20,000 were thus struck off the votes for the *personnel* of the fleet, and that some 13,000 men were then scattered hither and thither between the close of 1855-56 and 1857-58; while some 5,000 men (nearly) had to be added to the fleet in the very next year, and nearly 20,000 altogether within another twelve months, and almost 6,000 in a year after that. Let me put these figures plainly before you:—

		Reduction on previous years.
In 1855-56, average numbers borne	67,791	
„ 1856-57 „ „	60,659	7,132
„ 1857-58 „ „	54,291	6,368
Total reduction in two years ....		13,500

		Increase on previous years.
In 1858-59, average numbers borne	59,060	4,769
„ 1859-60 „ „	73,104	14,044
„ 1860-61 „ „	79,018	5,914
Total increase in three years ....		24,727

It may be added that between 1860-61, when 79,018 were borne, and 1865-66, *i. e.*, to the close of last financial year, when 67,890 were borne, 11,128 men were got rid of. Did time admit, I might go further into details that would still more astonish you, as to these reductions of the fleet. But I will only say, that in a single month's time between April and May 1856, very nearly 5,000 men were discharged to the shore from the ships of the Royal Navy.

Now, these facts are alluded to not to revive an old matter, about which enough of regret has been already expressed;\* and not even in the continental powers are endeavouring to augment their naval strength," and, therefore, that "it may be assumed that the number of our men will not be materially diminished." (p. 65.)—J. R.

\* Vide, *Admiralty Administration: Its Faults and Its Defaults*; (Longmans,) pp. 96, 97.—J. R.

order to say it was wrong that the fleet should have been so reduced. On the contrary, and keeping in mind that it is the Government and Parliament who decide as to this,—we may believe it to have been right and absolutely inevitable; and we may tell the *laudator temporis acti* that it was also ancient and traditional—if that need go for anything. For, between 1762 and 1763, at the close of the war with France and Spain, the actual reduction of the fleet amounted to upwards of 46,000 men. While between 1782 and 1784, after the wars with France, America, Spain, and Holland, the fleet was reduced from 105,443 to 28,878—a reduction of 76,600 men; and upwards of 10,000 more were discharged the service by 1786, that is in two years afterwards. About 65,000 men were also discharged between 1801 and 1803, though no less than 32,000 additional had to be raised the following year. And at the close of the great war with France and America, the fleet was reduced from the highest number ever borne in the Royal Navy, namely, 147,047 men, in 1813, to about half that number, or 78,891, in 1815, and to less than 23,000 in 1817,—a total reduction of no less than 124,000 seamen in the space of four years.

But do not let it be imagined that this reduction of the fleet, or disbanding of men, after a war, is peculiar to England. Precisely the same thing has been done—within months rather than years—by the Government of the United States of America. And, in fact, as already observed, the thing is inevitable. Therefore, in my opinion, no paper on Manning the Navy, would be at all complete, if it did not contemplate and ever keep in mind, as a matter of the greatest importance in all the arrangements which may be made with reference to our seamen, both during peace and war, the fact, that during war and in times of anxiety and threatened danger, much greater numbers of men are required for the service and defence of the country than in times of profound security and peace like the present.

You will at once perceive that a question here naturally suggests itself, What should be done with our best men when they are thus paid-off or disbanded, when it is prudent and therefore proper to reduce our forces? Perhaps a prior question should be asked—for no doubt you wish to deal thoroughly with this subject—What *has been* hitherto done *with* such men?—nay, should it not also be asked, What has been done *for* them hitherto? What was done with the good, and very good men of the 13,000, for instance, suddenly discharged from the Navy and disbanded between 1855-56 and 1857-58? I am sorry to have to reply, *Nothing*. *Nothing* to reward them for their services during the emergency—unless, of course, for the small proportion of them who were entitled to pension by long previous service—and *nothing* to keep them together, under any system or organization, which would have enabled the Government to put their hands upon them in a moment afterwards, when an increase of the fleet was really wanted the following and the succeeding year.

Need this other question be asked? Was it wise or politic, (not to say, Was it quite fair or just?) that all these 13,000 men should thus have been cast adrift, as if their past services during war and their probable future services in some other emergency were nothing to us?

There can be no doubt what your answer would be, whether it were given by the soldiers, or sailors, or loyal civilians now present. But this is not a matter of feeling, and therefore it must be observed, that nothing was done in this country for the still greater numbers discharged at the former periods mentioned, upon the cessation of sterner wars and larger reductions of the fleet; and nothing has even been done for those discharged from the American Navy in the present day. These changes and chances in the mortal life of the sailor are, in fact, regarded as merely part of the fortunes of war; and the gallant sons of Neptune themselves especially make little of them. That is no reason, however, for the naval officer or the statesman disregarding them. And it must be observed that in former days, "the fortunes of war" had some compensating advantages, which cannot quite be counted on in the present day, or for the future. Without entering upon political considerations, it will probably be admitted generally, that of late years the "adventurous sailor's" chances of prize money have been considerably diminished. Of course we must further admit, that during war, the citizens of a state are expected to make some sacrifices for the common weal; also, that the services of many soldiers and sailors are amply requited by the pay they receive while serving, and that it would simply be out of the question to consider that every temporary soldier or sailor could be pensioned. In these remarks, however, are not included either those wounded or disabled in Her Majesty's service. Chelsea and Greenwich Hospitals would be the reply, were this in doubt as to the past. And for the future, we may be certain that England will never be less generous than she has been—or, at least, has intended to be—towards those who have fought and bled for her, or have been worn out in her service. It must further be observed—for it can serve no good purpose to take an alarmist's view of this most important subject—that when war ceases, and especially a maritime war, commerce necessarily and naturally revives; and thus the seamen who are discharged from our men-of-war quickly find employment in trading vessels; so that, as regards the seamen themselves, the apparent hardship of sudden discharges from the fleet, is redressed by the rapid demand for seamen to man our merchant ships. Indeed, here is one of the great advantages of England's insular position, and of her great arm of strength being in her Navy. For it must be evident that there is less disturbance in the occupations of life, when a seaman is employed in the fleet and in the mercantile marine, than between the employment of the landsman, called from the loom or the plough, to serve in the ranks of the Army as a soldier. And yet we have seen *this* hardship not only cheerfully, but even enthusiastically submitted to, in Prussia at the present time, for the sake of Fatherland and the national glory, with a most glorious and marked success, due chiefly to the wise and economical organization of the *Landwehr*. This ought to read us, and all other nations, a lesson. Surely we, as a maritime nation—sea-girt more thoroughly than Prussia is land-bound—ought to have a Maritime Reserve-force that will equal the Prussian *Landwehr*, or the "Inscription Maritime" of France.

We are thus brought, you will observe, to the consideration of the third division of our subject, namely—*The Men reserved for Service*. Before, however, entering upon that most important branch of the question; let us review the matter once more under the other divisions already indicated, namely:—

1. Our standing Navy, or minimum force ;
2. Our contingent or variable force ; and
3. Our reserves.

You will doubtless concede, (1) that the very fact of our having reserves, implies that the Army or Navy cannot always be kept on a war footing, or at a maximum; (2) that the more efficient and available our reserves, the smaller ought also to be our standing or minimum force; and *vice versâ*. There is, however, one other proposition, which is not so self-evident, but which must further be made good, in order to do full justice to the whole bearings of the question; and it is this:—(3) that in order to meet the exigencies of the naval service, and to secure the interests of England and her extended commerce all over the world, even during peace, we must have sometimes a larger, sometimes a smaller force, employed in the Royal Navy, in short “a contingent or variable force,” upon which we can always rely to man the fleet, above and beyond our regular and standing minimum force. If this be granted—and I think it may be easily proved, if disputed—then, I venture to argue, that the system of our reserves ought to be such as to provide for such a contingent and variable addition to our standing Navy, as well as for suddenly manning the fleet in greater extremities, or “in an emergency,” and when war is proclaimed; or at any rate that our Naval Reserve ought to be such, as never to impede the manning of the Navy at any time. But, conversely, there is this great *primâ facie* argument in favour of this view; that a reserve so constituted might not only thus provide the country with a contingent or variable force which might be suddenly, yet quietly added, at any time, to the minimum force of our standing Navy, but it would also enable us whenever the Navy is reduced, to hold together and reward the most deserving men among those discharged, instead of as hitherto, scattering them hither and thither, and allowing them (not to say almost driving them) to seek employment, not merely in our own merchant service, but in the navies of other countries.

These considerations now force upon us the question—Does our present Royal Naval Reserve meet these requirements? I am obliged to say reluctantly that it does not. I am further forced to call your attention to the fact, since others have pointed it out already, that the reserve as now constituted not only fails to provide us with men when we want them during peace, but that it is now rather tending to stop the contingent supply of seamen, which the Royal Navy has ever heretofore obtained, according to its wants, from the mercantile marine. It is possible that even this effect of the Royal Naval Reserve system, may have been somewhat exaggerated. It is of no consequence to my argument whether it has been exaggerated or not. Some have gone so far as to maintain that it has abso-

lutely stopped our supplies of seamen! I have the following from another source, as accounting for any difficulty there may have been in getting men for the Navy:—

"An A.B. in the merchant service considers it a bad year if he does not get .....	£	s.	d.
"If he belongs to the Naval Reserve, his re- tainer and drilling pay amount to .....	30	0	0
	10	4	0
	£40	4	0
"While his A.B. pay in the Navy is only ....	28	17	11
	£11	6	1
"Difference in favour of the merchant service and Royal Naval Reserve .....			

"The Reserve seaman, after a voyage and if hard-up, can do his drill whenever he wishes, and will get £1 1s. a-week and his travelling expenses paid. The Reserve appears to be an inducement for our sailors to quit the Navy when they can."

That is one (and it is a sailor's) view of the case; though it understates the Navy rate of pay and omits its other advantages.\* Let us take a broader and simpler view, namely, this:—Not reckoning drill pay at all, for which at least some time and service are actually given, and not taking account of the future pensions, still the retainer of £6 per annum alone, added to the merchant seaman's wages, is of course, an enormous inducement to men to remain in the merchant service and join the Naval Reserve, rather than take a turn of service in the Royal Navy. If we thus "rig the market," as it were, against ourselves, and subsidize the merchant seaman to the extent of a fourth or fifth of his whole wages, need we be surprised if we consequently do have difficulties in getting men to enter the Navy?

On the other hand—for I do not want to "make out a case"—you will be gratified to learn, and it is my duty to put it here on record, that notwithstanding this "rigging of the market," as I have called it, or subsidizing (as it literally is) of the merchant seamen against ourselves, the following numbers of men have actually entered the Navy from the shore between 1861-62 and 1865-66, the first five years† in which the Naval Reserve has been in existence, with all its attractions:—

\* As regards pay alone while serving, I may explain that more than a third of our seamen have good conduct badges for which they are paid 1d. a-day each; a great number are also trained men and seamen gunners, for which they are paid from 30s. to £6 per annum, in addition to their ordinary rate of wages (27 July, 1867).—J. R.

† I take 1861-62 as practically the first year of the Naval Reserve: because in the year ending 31 March, 1861, the average number drilled was only 526. Even in 1861-62 it was only 5,011 (27 July, 1867).—J. R.

	Seamen of all classes.		Pure Blue Jackets.	
	First entries.	Men who had served.	First entries.	Men who had served.
In 1861-62.....	3,299	3,326	1,414	1,933
1862-63.....	2,888	3,495	673	1,907
1863-64.....	2,887	3,695	594	1,812
1864-65.....	3,331	2,457	795	1,041
1865-66.....	3,024	2,805	485	1,136
	15,429	15,778	3,961	7,829
	31,207		11,790*	

Still holding the balance even, and most sincerely anxious to avoid all unreality—or mere optimism as well as alarmist views—in discussing this important subject, I wish it to be kept in mind that the great pecuniary advantages of belonging to the Naval Reserve are probably now being more and more understood by sailors; and that therefore although 31,200 seamen, including 11,800 pure blue jackets, did as a fact join the Royal Navy voluntarily in those five years, and though “our ships for the last four years have never had to wait for men,” it does not follow that as many might be obtained in future if required. But, if not, then it cannot be denied that this is a most serious consideration, and affords an additional reason why we should now consider whether the system of our Naval Reserve can be all that it ought to be, if it has really created, or is likely to create, an impediment and new difficulty, hitherto unexperienced, as regards the manning of the Navy.

Do not, however, let it be supposed that in saying this I wish you to under-estimate the advantage the country has derived from the establishment of the present Royal Naval Reserve. The very knowledge of its existence has, in fact, contributed very materially to that feeling of security which enables us now to consider this whole question in a calm and statesmanlike manner. I for one do not wish to disturb that security, but rather to add to it, and give it a complete and lasting character. I know that in approaching this branch of the question I trench upon tender ground. But as I am rather propounding matters for consideration than proposing measures for immediate adoption, I may speak the more freely. I beg leave therefore to remark, that *the present Reserve is a very expensive force*; and upon reference to the report of the Manning Commission that recommended

\* As confirmatory of these statistical facts, I may observe that in the speech of the Duke of Somerset, in the House of Lords, last Friday, he is reported in *The Times* of Saturday (9th February) to have said: “As to men, our ships, for the last four years, never had to wait for men.”—J. R.



it, it will be seen that it was never contemplated, either by the Royal Commissioners or by those who advocated the establishment of the reserve, that it would cost quite so much as it really does; and it was certainly never anticipated that it would interfere with the supply of seamen which the Navy requires to draw from time to time from the merchant service.\* If so, this must be a sufficient reason for reconsidering the matter, and rectifying, if necessary, what may be amiss in the present arrangements.

As regards the great expense of the reserve, the retaining fees alone of £6 a-man for 16,000 men amount to £96,000, or nearly £100,000 per annum, while the expense of management, of drill ships, and drill pay is fully £100,000 more; whereas £200,000 was the total amount estimated by the Royal Commissioners as the annual cost of a reserve of nearly double that number (25,000), including for 12 school ships £40,000. Now, even if no more were said as to this expense, you might well be asked to consider, What is it we get for all this money, and whether a better outlay might not be devised? There is another important consideration which must not altogether be passed over, and it is this. Some 16,000 or 17,000 men are now enrolled and under pay in the reserve; but in addition to these numbers, how many during the last five years have there been upon the reserve lists that are now no longer there? How many have already slipped through our fingers after drawing their retainers and drill pay for one, or perhaps two or three years? The waste of seamen in the Royal Navy is carefully ascertained and frankly stated, and it would be interesting and important also to know, with equal precision, what is the average waste in the reserve.

But granting that the Naval Reserve is all we might wish in its character under its present constitution, and that the waste which is inevitable has not been very excessive, the question still remains, Might its constitution not be improved, and might not our Naval Reserve be made a means of facilitating the manning of the Navy in peace as well as during war? I further venture to ask, whether the training prescribed by the regulations for the Naval Reserve, is sufficient to secure that you shall have a force of thoroughly trained men when the reserve is summoned for service and called to join the fleet? Or, would not the paid-off men-of-war's men, with five or ten years' previous service in the Navy, if *they* had been formed into a reserve when the fleet has been reduced, have formed a somewhat better reserve than that which we now possess?†

It must also be kept in mind that what has been called our "contingent or variable force" cannot be provided by increasing the number of boys regularly trained in the Royal Navy, but must necessarily be

\* This can be succinctly proved by an extract from the pamphlet on *Naval Expenditure* :—

"The measure [the establishment of the Naval Reserve] has been attended with another good result. It has brought the mercantile marine into closer connection with the Royal Navy, and has tended to remove prejudices which in former years seriously interfered with the manning of our fleets." (p. 20.)—J. R.

† Vide, *Admiralty Administration*, &c., p. 102.—J. R.

drawn, as heretofore, from the mercantile marine. It cannot be provided by increasing the number of boys training, because, whatever that number might be, the boys could only grow into men *in time*. They could not become men any faster because you wanted them suddenly, and they *would* grow up into men quite as fast at times when they were not wanted at all. Only a contingent supply of *men*—of sailors ready made—will enable you to make additions to your standing Navy when political considerations require the fleet to be suddenly enlarged; and our system must be such that we may easily, and, it may be, suddenly, afterwards reduce this contingent force, and fall back upon our normal *minimum force*, or "Standing Navy." If, then, our Naval Reserve could be made available to meet such contingencies, it would surely be an immense advantage. And, at any rate, the system upon which our reserve is established ought certainly not to be such as to operate as a hindrance to our obtaining such contingent and temporary additions to the Navy from the merchant service.

If there be now, as some assure us, an unwillingness on the part of merchant seamen of good character, who are eligible for the reserve, to enter the Royal Navy, on account of the unquestionably great advantages which the reserve does offer them, then this unwillingness and undesirable state of things—this practical divorcing of the merchant seamen from the Royal Navy—is likely to increase. And it therefore becomes a very grave matter for consideration, whether the reserve system must not be abandoned, that is, if it cannot be so modified as to change its present adverse influence into a means of facilitating the manning of the Navy whenever men are required during peace, as well as providing a mere exceptional reserve in the case of some long-distant war.

Of course some may be found who at the very first hint of any reform or improvement or modification in the constitution of that force, will be ready to raise the cry that it is sacred, and must not be touched! and that it cannot be, without "breaking faith with the reserve men!" Here, I presume, you will be ready in the first instance to hear what is proposed, and afterwards to judge calmly and fairly what is put forward. But I do not hesitate to say, that if it is clearly demonstrated that the Royal Naval Reserve, as now constituted, impedes the manning of the Royal Navy;—or that it places the merchant seamen who enter it at too great an advantage compared with the seamen who are actually doing us service in Her Majesty's ships; then it might be the duty of Parliament and the Government even to abolish the reserve altogether; or, at any rate, that any fresh and more equitable terms which might be deemed advantageous for the interests of the country might fairly be offered, even to the men now enrolled in the reserve, leaving them, of course, quite free to quit the reserve or to continue in it on new terms at their option. This is a matter of far too great national importance not to be considered gravely and most fully in all its aspects.

Let us then look at a few main points affecting this question, as they must present themselves to the seamen of the country, and to all who take an interest either in merchant sailors or men-of-war's men. An

A.B.'s continuous service pay, while serving in the Royal Navy, is £2 9s. 1d. a-month, or about £30 a-year. We are now paying some 16,000 Naval Reserve men £6 a-year each for doing nothing, but only promising to serve hereafter, if wanted, during some great emergency; and we pay them besides for the days of their drill, &c., to qualify them for this future service, and we are to pension them hereafter. Add to this the expense of management and training ships, and the annual cost, as shown in the Navy Estimates, is upwards of £200,000. In each five years this amounts to one million sterling; in ten years to two millions. And I put the matter in this way, because suppose (as is most probable) we have ten years of peace subsequent to the time the reserve was instituted, we shall then have paid two millions sterling to and on account of men the majority of whom have never served us, and many of whom could then never serve the country at all.

It may here be observed as to our periods of peace and war, that we had peace from 1815 down to 1840, that is for 25 years. From 1840 to 1843 we had what we call "war with China" for three years. But our highest number of seamen, marines, and boys in the fleet during that period was 43,105—not very much more than half our present numbers during peace. I do not know whether such a "war with China" would be regarded as such an "emergency" as to require us "to fright the isle from its propriety," and to call upon our highly favoured Royal Naval Reserve to give us some actual service. I don't think that sensible people considered that unfortunate squabble with the Chinamen "an emergency," or a threatened danger to Great Britain, any more than they now consider a brush with the New Zealanders or Japanese of very much consequence, except that these "little wars" are known to cost money, and to yield us little benefit or honour. But, anyhow, for 10 years more, from 1843 to 1854, we again had peace; and then came the brief war with Russia for less than three years, at the height of which we have seen we had 67,791 men and boys in the Navy, or somewhat *fewer* than were borne in the fleet last year. The "fleet men" of the Coast Guard are of course included in this comparison, as they did not exist in 1854-1856; and they form a real addition to the naval force of the kingdom. Since the war with Russia, we have had 10 more years of peace, and it is to be hoped we may have twice 10 years more at least besides. And therefore it is important to consider how much we must pay our reserve during every decade of peace at the present rate. In another 10 years it will cost us—that is, if its annual charge be not increased—exactly another 2,000,000 sterling.\*

There is another reason why your attention should be called to these figures. Two millions sterling happens now to be just about the sum paid every year as the whole wages of the officers and seamen actually serving in the Royal Navy, excluding boys and marines. (*Vide Esti-*

\* You will find it stated in the lucid pamphlet on *Naval Expenditure*, that the present regulations were specially framed, "to relieve the reserve men from the apprehension that they might be compelled to serve whenever a sudden addition to our fleets was required." (p. 19.) So it is not in every war we need expect these men to serve. (*Vide also, Admiralty Administration, &c.*, pp. 117, 118, 130, 131, 132.)—J. R.

mates, 1865-66.) That being the case, is it not important to reflect that we pay fully one-tenth of this sum to and on account of men who are not serving us at all at present, but only under promise to serve, and only still learning their drill? Nor is this all. The cost of the Naval Reserve is annually more than the pay of all the officers, seamen, and boys of the Coast Guard afloat, or of those ashore; the estimate for 1865-66 being only £129,941 for persons afloat, and £179,690 for persons on shore. Once more; the wages of 8,000 marines actually serving afloat last year amounted to less than the cost of this reserve! It actually costs us about half as much per annum as the whole wages of 16,000 Royal Marines!

Its cost might further be compared with other items in the Navy Estimates; but perhaps enough has been said for those who will think about it; so I pass on, without comment, to some other considerations.

We are under no obligation by the Naval Reserve regulations to continue the £6 retainers when the men are actually called out. Therefore, by the terms of the existing arrangement, the Naval Reserve men will be paid *less* during war than in peace! If, then, men are "backward in coming forward" to fulfil their agreement, under these conditions, it may be a question whether they would be held to their agreement, and whether the country might not feel bound to pay them their retainers in addition to their navy wages, just as they now get them in addition to their merchant wages. Perhaps it would be better to pay them well while thus serving us, rather than now. But, if the retainers were thus continued to the reserve men, it must be evident that an equal boon must then be given to every seaman serving in the fleet! And, if you paid this to your seamen as an annual war-bounty, which it would be, could you withhold it from your marines, who fight alongside of them; or even from the boys, who with them would brave the same dangers? I think not. Well, then, this alone would add about half a million sterling to the wages of even our present numbers, say 67,000; as 67,000 by £6 is = £402,000, to which must be added £96,000 to 16,000 reserve men. But if upwards of 67,000 persons are *now* required for the Navy, during war that number must be greatly exceeded; and so this additional cost in wages would be enormous.

I do not allude, however, to this probable prospective addition to our future war charges, so much to object to the additional cost of the Navy during war, as to advocate a little economy during peace, to enable us to bear somewhat better this unquestionably heavy war-charge. Of late years we have learnt very thoroughly to appreciate the value of the principle implied in the words of Tacitus, *Paritur pax bello*. But surely a little reflection will show that this precept cannot be acted on perpetually, or it would end in the ruin of a state. Such a constant preparation for war would lose its practical influence, and only after all lead to international rivalries, and what have been described as "bloated armaments." *Paritur pax bello* ought only to apply to an abnormal and exceptional state of things. For a continuance and in ordinary times of peace, and having due regard to what we call in modern phrase "the ways and means," that is to "the sines of war," another precept in homely English ought to have some

influence, and it is this—*Save well during peace, that you may pay well during war.* Even if we do not grudge an additional half million per annum during hostilities, we may still reflect that every two millions we spend during each ten years of peace, would pay an extra charge of half a million sterling for actual war service during four years!

Without, then, at all under-estimating the value of the *security* which an efficient reserve provides, even if it be expensive, the question still remains, Could not the same, nay, a better, security be obtained on easier terms? I shall not occupy much of your time with propositions as to how the expense of the present reserve might possibly be lessened. We might, for instance, have a war rate of wages for A.B.'s in the Navy of £36 per annum, besides seaman-gunner's pay, badge pay, &c., to the more highly qualified men; and the Naval Reserve men, instead of being subsidized, as now, during peace, might be only paid while under drill, and have this prospect of high wages in the Navy held out to them during war, and when actually serving—the reserve being made the door for entering the Navy. That might be one way of saving our money during peace, that we might pay liberally during war. Or, if that were not sufficient inducement to get men to enter the Naval Reserve, accustomed as they now are to think of the better terms of the present system, there is another way in which we might save something of our existing heavy peace expenditure. We might limit the number of the paid men in the reserve to, say 5,000 or 10,000 (letting the present number gradually drop to that limit); and in future enter another 10,000 or 5,000 only as probationary reserve men, without paying them any “retainers,” except the pay they would receive while under drill and qualifying to get on the *Paid List*; and we might advance them to the *Paid List*, when trained up to some standard, and only as vacancies occur.

But these may be called “half measures,” and I do not now advocate either of these compromises, in throwing them out as suggestions for which something might be said, if nothing better could be devised.

There is another and a better way in which our Naval Reserve might be constituted, and which you must have already anticipated when we were considering the dispersion of our seamen upon former periodical reductions of the fleet. The Royal Naval Reserve should be composed exclusively of “blue jackets,” who have actually served in the Royal Navy—that is, of already thoroughly-trained “men-of-war's men,” who have served at least a commission in a Queen's ship; or, let us say, of seamen having from 3 or 5 years up to 10 or 15 years' service in Her Majesty's ships. Their “retainers” might be at the present rate, or (as I would rather advocate) graduated according to their good-conduct-badges, qualifications, ratings, and periods of service; and these retainers might be regarded in a double light: as rewards for past services, as well as retainers for future service when required. I purposely avoid suggesting particular details, that on the present occasion our attention may not be diverted from principles which are

more important. But I have sufficiently indicated, that it is intended that the best men would be the best rewarded under the proposed arrangement. These retainers should be paid periodically, as they are to the present Naval Reserve, say half-yearly, or when the men are "at home" between voyages while employed in the merchant service. And they should be paid upon condition that the men shall be ready to rejoin the Navy, not only during an emergency, or when called out by proclamation during actual war (like the present Naval Reserve), but *whenever their services are wanted in the Royal Navy*. Only men-of-war's men of good and very good character, not otherwise entitled to pension, should be eligible for the reserve; and no merchant seamen should *in future* be allowed to enter it, without a previous service of five years in the Navy, or during the commission of a Queen's ship at least. During this service the men would undergo a thorough training in the fleet, and be afterwards efficient reserve men, without the expensive four weeks' drill per annum now prescribed.\*

Should the Royal Naval Reserve be modified in its constitution, as proposed, and thus become filled with trained men-of-war's men, one-half its present cost would be saved; and this alone would leave a large margin for any increase to the pay of the pure blue jackets of the Navy, which might further be deemed advisable, in order to make the Queen's service with all these inducements preferred to any other service afloat. There is simply no doubt whatever that the higher rates of pay in the American service, higher at least nominally—for our Navy pay is, in fact, much higher than it seems owing to the present system of paying a lower rate with endless additions, instead of a good round sum—I say there is no doubt that the higher rates of pay and greater comforts in the American Navy, and certainly in its mercantile marine, actually draw off thousands of our best seamen from our merchant service and even from the Royal Navy.

In round figures, our merchant seamen, *excluding* foreigners, number above 300,000; and the very best men of that large body of seafaring persons ought to be our grand source for feeding our Royal Navy with a constant supply of seamen, and especially whenever we require to increase our standing force. The mercantile marine must also in fact be the grand resource, whence our *war levies* are to be drawn, after our reserves are called out. But I am obliged to pass over all besides that this consideration might naturally suggest.

\* I am glad to know that it is now proposed to carry out to some extent one recommendation of the Manning Commission hitherto disre-

\* A few years ago, but before the establishment of the Royal Naval Reserve, I suggested a re-adjustment of the pay of the Navy, with an increase to some of the seamen ratings, with the view of making the Navy preferred to the merchant service, and accomplishing by this means a flow of merchant seamen through the Navy, like what France secures by positive legislation. But at that time one could not hope to complete the plan, by the payment of retainers after the men had taken their turn in Queen's ships. But this has been now rendered possible by the establishment of the Royal Naval Reserve. (Vide, also, *Admiralty Administration*, &c., p. 111.)—J. R.



garded, namely, to establish a number of school-ships for the purpose of training boys for the merchant service. This, however, will be chiefly advantageous in a social point of view, as a great benefit to the class of boys intended thus to be rescued from crime, and taken care of, and trained to a useful calling. But it is out of the question to expect that any such system of school-ships can be adopted to such an extent as to supply the wants of our whole mercantile marine. It would also be undesirable, even if practicable, to provide that the race of British sailors should be exclusively augmented from the "waifs and strays"\* of our over-crowded populations in cities, while no fair opening is provided for the children of our seamen and of other respectable members of society. Trades and professions, and especially crafts like that of the sailor, are all more or less hereditary, and naturally so. And no artificial means we could devise, we may be very sure, could possibly be so advantageous for training up a race of thorough seamen, as the giving of facilities to our sailors to take to sea along with them, in the vessels in which they may be serving, their own sons, or their nephews, or the children of their neighbours, in whom they would naturally take an interest. But these facilities can only be secured on a sufficiently extensive scale by a certain proportion of boys being required to be borne in our trading vessels.†

There remains, however, an important consideration as regards our sailor boys, whatever plan may be adopted for their increase. Will they remain in the British service after they have grown into men? If not, of course it must be evident that all our labours to increase their numbers will be but labour in vain. It is both true, and quite notorious, that the greater proportion of seamen in the American Navy are British sailors. When Captain Toynbee's paper was recently read at the Society of Arts, it was, however, adroitly argued, with reference to this other fact, that the number of foreign sailors in our merchant service was gradually increasing, that this would prove that our service was preferred, and was not so bad as it has been described. But retorts of this character in an evening's debate scarcely help us to get out of difficulties. To a certain extent, we ought to recognize the fact that there will always be a sprinkling of foreigners in the service of any

\* Described in plain language as "pick-pockets off the streets of London," in the House of Lords last Friday. (Duke of Somerset's speech, *Times*, 9th February, 1867.)—J. R.

† The *Saturday Review* of last Saturday (February 9), states this:—"Both on our eastern and on our southern coast, there are families, members of which have served in the Royal Navy or the merchant navy for many generations. No waste of power could be more perverse and more deplorable than to leave this natural aptitude unused and useless."—J. R.

The *Saturday Review*, however, also advocates the new school-ships. It says—"A more valuable boon to the Navy and the nation would be the execution of a project by which the young Arabs of city life might be rescued from the contamination of hypothetical fathers and spurious brothers, &c., to become useful apprentices to a service associated with the popular prepossessions of the most cherished recollections of this country. With many of them the State could not do better than train them up to become sailors in the mercantile, and afterwards in the Royal Navy."—J. R.



country and in every occupation of life. The small proportion of foreigners in the English mercantile marine (some 9 per cent.!) need not, all things considered, be a source of anxiety to us at present; at all events, it is a very different matter from the very large proportion of British seamen that are to be found in American ships. There can be no doubt, I presume, that our men in transferring their services to the American service, simply consult their own interests. The three chief attractions seem to be simply, higher wages, more liberal rations, and greater comforts in their sleeping places, through the "house on deck," which is common in American vessels. Their treatment otherwise does not seem to be better, or so good elsewhere, as in our own service. There appears to be but one remedy for this unsatisfactory state of things. *The British service ought to be made equal in all respects to the American.* It will be discreditable and almost disgraceful to us, if this country cannot accomplish that. The details, however, are not matters for consideration here. It is clear that the subsidies of the Naval Reserve must tend to check this transfer of our seamen to America and other services, and to bring them back to British ships.

I must just glance at another point. There are some who are of opinion that an enormous increase of boys should be trained in the Royal Navy. Not being a sailor myself, I must quote a well-known sailor's opinion of this—one who has also well studied the subject. He says, "I cannot help repeating the opinion I have often expressed on the impolicy of forming so large a portion of the crews of ships-of-war of young boys, with the view of rearing naval seamen, these boys being for a long time of little value; and particularly when it is found, that but an inconsiderable portion of them adhere to or are fit to be retained in the naval service. The expense of rearing up thousands of boys to manhood, with the view of retaining some, appears to me a very questionable policy; for under proper regulations, the required number of young sailors brought up in the merchant service might be readily induced to serve in the fleet long enough to acquire [a knowledge of] naval duties; and surely it is better that a large number of our mariners should be so qualified by passing through the fleet, than to make the Navy exclusive, and confine it to the few who elect to remain in that service; for these being retained continuously or re-entered, must of course exclude others who might be induced to change their service occasionally."—(J. H. Brown, Registrar-General of Seamen and Shipping, in Appendix to Manning Commission's Report, 1859, p. 364.)\*

These opinions I may remark were written before the establishment of the Royal Naval Reserve; and some of them could only be fully justified were the Naval Reserve hereafter to be composed exclusively of seamen who had previously served in the Royal Navy. We would thus, in fact, secure a reserve as well-trained and as available as the boasted *Inscription Maritime* of France.

\* One unquestionable effect, however, of training an immensely greater number of boys in the Navy is thus summed up in the pamphlet on *Naval Expenditure*:—"If, indeed, the country should undertake to train merchant seamen at the public expense, a heavy additional charge will be incurred." (p. 65.)—J. R.

To revert, then, to our main proposition, the establishment of a Royal Naval Reserve, composed exclusively of trained men-of-war's men, I admit it may fairly be asked what I mean by speaking so emphatically of economy, while hinting at some increase in the rates of pay to the pure blue jackets of the fleet now, as well as at having a paid reserve as at present, and probably a higher rate of pay in the Navy during war?

I shall frankly reply to these questions categorically.

1stly. The pay of the Navy is at present most liberal and perhaps sufficient, if all the additions to the nominal rates of wages are taken into account; but by a simplification and re-adjustment of present rates and additions to pay, with a very inconsiderable addition here and there to get rid of fractional differences, I certainly think it possible to establish nominal rates of pay in the Royal Navy, that would bear comparison with those of any other service either in this country or America, and that without disregarding economy.

2ndly. The Naval Reserve I propose will be a reserve of thoroughly trained men-of-war's men; and supposing that they did cost as much as the present reserve, I put it to this assembly of naval officers, whether a Naval Reserve so composed, would not be better worth the money? But, even if the retainers of this thoroughly trained reserve were, on an average, as high as those paid to all the men in the present Naval Reserve, we must remember that all the machinery and expense of their training, and their drill pay and travelling expenses, &c., would be saved,—that is about half the present cost, at least.

3rdly. As to the hint of a higher rate of pay in the Navy during war; to say the least, this is only another way, and, I submit, a better way, of paying "bounty" for war service. Considering also the modern innovations upon ancient war privileges, I am prepared to advocate this as a straightforward, equitable, and, if well considered, an economical measure.

But in answering these questions thus baldly, I have done but scant justice to the proposed reserve. In a few brief sentences, in conclusion, I shall endeavour to show you its other advantages.

1stly. If we have a Naval Reserve which is all we could desire, we could of course reduce our standing or minimum force to less—perhaps considerably less—than that which we now maintain; and it is here we should exercise our chief economy.\*

2ndly. A reserve of the kind proposed, the advantages of which become a reward and boon to men who have served in the Royal Navy with good characters, will tend to press our merchant seamen to enter the Navy, in order to become qualified to enter the reserve and share in these advantages. Thus, such a reserve would tend to send men into the Navy, instead of (like the present system) to keep men out of it.

3rdly. Although it is part of the scheme that the reserve men should rejoin the Navy whenever wanted, the practical effect would be that the merchant seamen would generally press forward to fill up your

\* As is well known to the initiated, and on the authority of the pamphlet on *Naval Expenditure*, I may observe that "the principle which regulates the amount of the Navy Estimates is the number of men voted." (p. 65.)—J. R.

vacancies when men were wanted in the fleet, in order that they, by serving their turn in the Navy, might be eligible for the reserve. By some slight management as regards the arrangements made, every reserve man might further be made practically a "recruiting officer" for the Navy, who would induce the merchant seamen to join the fleet when men were wanted, for the sake of future advantages, such as those which the new reserve men themselves would enjoy.

4thly. The proposal to make the amount of retainers depend upon a man's badges, qualifications as a gunner, and rating in the Navy, would simplify the arrangements as to their being paid the retainers, or even double such retainers, when required to serve during war. One badge now represents 1*d.* a-day, or 30*s.* a-year; a trained man's additional pay the same sum; a second-class seaman-gunner gets twice as much, or £3 a-year additional; and a first-class seaman-gunner 4*d.* a-day, or £6 a-year. A man with three badges thus also gets £4 10*s.* a-year in addition to his other pay. Without entering into further details, it is easy to see how these additions to pay might serve to regulate the amount of retainers to men in the reserve, and the extra war rates of wages, which I advocate chiefly on behalf of our best and most efficient men. I do not by any means propose an indiscriminate and general increase of wages or of advantages to all the seamen entering the Navy, either during peace or war. There is nothing in what I recommend that would tend to induce a rivalry in the rate of wages between the Royal Navy and the mercantile marine.

But, on this point, I ought to observe that it will be found from a return in the blue-book of the Manning Commission of 1859 (p. 363), that wages in the merchant service during war, though they may sometimes temporarily rise, are not maintained at higher rates while war continues, but are actually and almost always highest during peace. It has also been often said that the Navy is less popular than the merchant service, from the greater amount of foreign service in the Navy. Were this true, a remedy might be possible; but I find that in the merchant service, out of 195,000 men employed in certain vessels in 1864, 138,000 were in ships engaged in the foreign trade, nearly 12,000 in vessels partly home and partly foreign, and only 45,000 in vessels exclusively in the home trade, *i.e.*, about one-fifth of the whole.—(Annual Statement of the Trade and Navigation of the Kingdom, 1864, p. 448.)

I must now conclude, reserving many other points, in order to give time for discussion; and I have purposely reserved many explanations which might have been given in elucidation of the views I have inadequately ventured to advocate; thinking it better to reply to objections which may be actually raised to what has been advanced, than myself to select objections, and answer them in anticipation. I shall only further say, that in bringing this question forward, my only wish is to discover what may be best for a service which I regard as one of the noblest under the Crown, and the most important for the security of the British Empire.

The CHAIRMAN: You will allow me to express your thanks to Mr. Reddie for his admirable and lucid paper. We shall be very glad if any gentleman will make any remarks upon it, and bring out the points of this important subject.

Rear-Admiral A. P. RYDER: Considering the great importance of the subject, I think it would not be respectful to Mr. Reddie to attempt any discussion at this late hour of the evening. I would suggest, with your permission, that we take the opinion of the members present, and if they approve it, that we adopt a course that has been adopted on a previous occasion, viz., to ask the Council to allow the paper to be printed, and copies to be distributed to those persons who may wish to take part in the discussion, and after a short interval to have another meeting for full discussion.

Commander W. DAWSON, R.N.: I think this is a very proper recommendation, for it is exceedingly difficult in a matter of figures to go into the question at once.

Captain SELWYN, R.N.: Will the course proposed preclude our going on with the discussion this evening?

The CHAIRMAN: No. It is open to any gentleman to make any remarks that he may wish now; and then there might be an adjournment for a full discussion on the paper when printed.

Commander W. DAWSON: It is exceedingly difficult to follow the number of figures in a paper which we have not before our eyes, and I shall therefore not attempt to enter into the *minutiae* of the question now, as I hope to be able to do when we have the paper in print. It appears to me that the subject of manning the Navy divides itself into two parts; firstly, with reference to peace, and secondly with reference to war; and in discussing the numbers of men required, I think it is important we should distinguish clearly between those who are *bonâ fide* seamen, and those who may be classed as artificers and stokers, and those who are marines. As far as I can see from these figures, there is one-third of each of these classes required. In dealing with figures in the merchant service, I think it would be advisable if we could have the numbers similarly separated for the purpose of reference. Because it is very difficult to understand where the number of 350,000 seamen said to be in the mercantile marine, come from. I have not been able to find them anywhere. It would be a very good thing if we had the actual numbers classified, because the crews in the merchant service are variously composed, as in the naval service. There is a class of domestics, another of artificers, another of firemen; and it would be as well if these were separated from the list of foreigners and of British seamen in the merchant service. The figures I have before me do not distinguish between these classes. I think, however, this distinction ought to be thoroughly understood. We are told, for instance, that the foreigners in the merchant service amount to only 9 per cent. of 350,000. That may appear a very small percentage, if that 350,000 are all actual seamen; but if there are only 106,000 British and foreign petty officers, able seamen [in the British service, then the proportion of foreigners will be very much larger. In dealing with figures, it shows that we must be careful how we twist and turn them. We must have the figures before us before we can enter into the merits of a question like this. What we have first to arrive at is, to discover what our probable wants are. Now, I think to instance the number of seamen employed in the Russian war does not advance the argument at all. The Russian war was not a maritime war. It was simply a yachting cruise up and down the Baltic, and though there was a little fighting in the Sea of Azoff, it was in a small way, and had not the magnitude of a maritime war. The figures we must look to are those of 1814; there has been no real maritime war since then. The total numbers then, were, I find, 147,000. Taking the proportion of one-third marines, one-third artificers and stokers, and one-third seamen, we would arrive then at an idea of what we would now require.

Mr. REDDIE: You had then no stokers.

Commander DAWSON: I am using these numbers in reference to the present time. And I think it must be patent to any one who goes into the matter at all, that we will require a great many more men, hereafter; not because our ships require more men, but because in 1814 there was not a flag upon the ocean that could contend with us anywhere. But hereafter we may have to contend against a powerful

maritime nation, or against two or three that may combine against us. We have had, for instance, such a thing as France and America combining against us before, and we might have such a thing happen again. Or we might have a rising maritime nation like Italy, her fleets manned with Genoese and Adriatic seamen, and commanded by an Italian Tegethoff, combining with other nations against us. Then, I say, we must be prepared to meet one or more maritime nations, and to contend with them in a struggle which would be more severe than any that befell us since the battle of Trafalgar. We shall want a great many more men than before. The question is, where are we to get these men. If we take 180,000 men as our requirement, and suppose that one-third of them are to be seamen, according to the present regulations, one-third marines or soldiers, and the other third stokers and artificers, it becomes a very large subject of inquiry as to where these men are to come from. I do not think the propositions that have been made to-night to secure us a reserve that we can fall back upon in case of a sudden maritime struggle, will meet the requirements of what I think is a very large case.

The CHAIRMAN: Would you propose 80,000 men for the reserve, because it would require that number to make up the deficiency?

Commander DAWSON: No, I think not. There would be 60,000 seamen required for the service if one-third of the whole are to be seamen. It is a question—a very grave question—whether we should not also have a reserve of stokers and artificers. But, confining our attention entirely to *bond fide* seamen, the Royal Navy has, in round numbers, about 20,000 seamen now. We have, within five years, reduced our naval force by 9,000 *bond fide* blue jackets; so that there are only 20,000 now afloat. The question is, where are we to lay our hands on 40,000? We leave out of the question for the moment those contingent seamen, whose numbers oscillate in time of peace. I think Mr. Reddie has brought forward one very good suggestion to supply a part of this reserve. But I would carry it a little further. My idea of the reserve, speaking of men-of-war's-men is this, that every continuous service seaman when he has completed his ten years, unless he holds a petty officer's rating, should be liable to be discharged. Therefore, we should be able to discharge them at the end of ten years without feeling the loss. We should never have to call upon the merchant service to supply us with men during peace, but we should supply the merchant service with our own ten-year's men; and these should receive small pensions on condition that they shall serve afloat, and shall not take to cab-driving and omnibus-driving, and so on. Unless you have some rule about serving afloat, you will find that persons who have been seamen will take to driving cabs in London, and other land employments, as many have been doing for many years past. I think that would form a very valuable reserve; but we cannot make it sufficiently numerous in a day or a night. It would take a great many years before we could form a considerable reserve in that way; and at any time—(I do not know that I can now enter into the figures, and say what numbers it would eventually reach, it is a matter of simple calculation)—it would only reach a limited number, and would never in itself provide the numbers required in time of war. I think, therefore, we must also fall back upon that most invaluable body of seamen—the Royal Naval Reserve. Whether the Royal Naval Reserve is conducted on the most economical principles or not I do not know. There is one thing to be said of all reserves, be they militia on shore or sea reserves, that they must be paid for, and must cost money. The total of that money added up for a number of years must be considerable, but may be regarded as an insurance fund. The question is, is that insurance worth paying? If you can get these men in large numbers at the outbreak of a war, then, I think, you will have paid a good insurance. Another valuable feature of this Royal Naval Reserve, I think, consists in its breaking down the partition wall of prejudice which exists among merchant seamen against men-of-war. Merchant seamen are now taken on board a well-conducted training ship; they are placed under the orders of naval officers, and they find that naval officers are not negro drivers, and that a ship-of-war is not a prison; and they go away with their prejudices broken down. There is another prejudice which we also get over, which is the prejudice that exists in the mind of naval officers against having anything to do with merchant seamen and merchant officers. If we can break down that wall of partition which now divides

the two services, it will be most invaluable. (The CHAIRMAN: I don't think that at all.) Well, I don't know. There is a sort of professional jealousy in all professions, and I think we have got our professional jealousies as much as other people. Supposing you adopted the principle of manning the Navy in time of peace that I speak of, so that we never should require to get men from the merchant service, a good deal of objection that has been raised to the reserve would be got over. We would supply the merchant service instead of the merchant service supplying us. On the contrary, to my mind it is a great pity that the Royal Naval Reserve is so very limited in numbers. We have got only 16,000 men, but they are the cream of the merchant service—the very best of the merchant service. I have been on board one of the training ships; I have seen those men training guns under different officers; and I must say I was excessively pleased with the way in which the work was done. It was done efficiently—thoroughly well. It might not have been done in the fly-away style in which men-of-war's men are brought up to do it; but it was done thoroughly, and I should be proud to have command of a ship manned by such men as those. I say it is a great pity that, instead of being 16,000, it is not 48,000. For I look upon it that 48,000 is the least number that we should try to obtain from the reserve. Now it is a question how that can be done? I am told the regulations are drawn up too tight, that we should not be so strict in our requirements, and that if we were not quite so strict in our requirements we might perhaps get more men. This brings me to the number of 350,000 men. How is it that if there are 350,000 able seamen—

Mr. REDDIE: Not able seamen.

Commander W. DAWSON: That is the question.

Mr. REDDIE: 350,000, including seamen, officers, firemen, stokers, foreigners, everybody.

Commander DAWSON: These classes do not come into the question.

Mr. T. GRAY, Board of Trade: I may perhaps set you right about numbers. Do I understand you to say there are 350,000 men in the merchant service, including all ranks? The number of men, boys, stokers, petty officers, engineers, Lascars, foreigners, and other persons. Everybody, all told, throughout all the ships of the United Kingdom of Great Britain and Ireland (but not including her dependencies) amounts to 197,643.

Admiral ERSKINE, M.P.: It is not according to the Board of Trade returns. If you look at the last Board of Trade returns, you will find the number is 350,000.

Mr. GRAY: I think it would be as well to look at the numbers carefully before the next meeting.

Mr. REDDIE: I have not got the Board of Trade returns here, and I do not think Mr. Gray has given the correct numbers; but here are the returns from the blue-book of 1859, furnished by Commander Brown, registrar of merchant seamen. The total number of seamen and boys serving in the Royal and mercantile Navy, excluding marines, was 322,000 in 1857.

Mr. GRAY: In the Royal Navy?

Mr. REDDIE: And mercantile Navy. In this return there were in the registered merchant ships belonging to the British empire 284,000 men and boys in 1857, and they have got up to 350,000 by the returns that Mr. Gray was kind enough to send me. It is a very heavy book, and I have not brought it with me; but there are certainly 350,000.

Mr. GRAY: Yes, but the 350,000 includes all sorts of men in ships in British possessions abroad, that never come near to the United Kingdom at all.

Commander W. DAWSON: It only shows, when we have such great authorities speaking to so wide a difference as 190,000 and 350,000 men, the necessity of having these figures before us.

The CHAIRMAN: It is not a difference, but Mr. Gray has read the return wrong.

Commander W. DAWSON: As I said at the beginning, we must try to distinguish between what we actually want in the shape of blue jackets, and what we want in shape of artificers and firemen. Now, able seamen and petty officers are the same thing; they are equally qualified. It seems to me that there are about 106,000 able



seamen in the merchant service, taking it in round numbers. We are very glad to have firemen, and it is a question, as I said before, whether we ought not to have an organised reserve of stokers and artificers. But if there are 106,000 able seamen, it seems odd that, with all these advantages which are held out, of £10 a-year, &c., &c., we cannot get a larger reserve than 16,000 men. For my part, instead of finding fault with the Naval Reserve, I wish to see it three times as numerous. Then, if we had 48,000 men, we might perhaps be able to lay our hands on 30,000 or 40,000 in case of war, for we must allow a large margin for persons whom we could not get. It is a very grave question whether it would be better to increase the reserve and reduce the force of the Navy; but when the force of the Navy is being reduced, I think it is an important consideration as to which part of the force ought to be kept up. During the last five years there has been a reduction of about 9,000 *bond fide* seamen in the Royal Navy. That seems a very large number.

Mr. REDDIE: You reduced the fleet by 11,000 in that time.

Commander W. DAWSON: I think it is a great pity that in times of peace we cannot settle what the standing Navy ought to be. We can, however, reduce the Navy when necessary, by discharging the men over ten years' service with a small pension, and putting them into a reserve. That seems to me the legitimate way of getting over the difficulty of the contingent increase and decrease in peace; and that men, after ten years' service, may be retained when temporarily necessary, but should be liable to discharge into a reserve, with short service pensions; an extra number of boys being trained up to maintain the constant overflow of seamen into the mercantile marine. At this hour of the night, and as there are other gentlemen to speak, I will say no more.

Mr. GRAY: In order to be accurate, I think we should look into the returns; and I shall have great pleasure in verifying Mr. Reddie's figures. But I think he makes a mistake in including in his figures everybody on board ship. The men qualified to enter the Naval Reserve are able seamen, and I think that is the number we should take to work upon, and not foreigners, Lascars, stokers, firemen, and idlers. To arrive at true results, we should take the exact number of able seamen in the merchant service, as that is our only true reserve.

Mr. REDDIE: I may explain the reason why I took gross numbers in the Navy in some of these tables. I have not drawn any argument from them at all; but I have used them merely to show that the fleet was reduced by those numbers. And you must always recollect that the other persons in their way are necessary on board ship, although they are not blue jackets.

The CHAIRMAN: It struck me that Mr. Reddie was not going into detail, and going into numbers would be going into detail and leaving the principle, which is the real point, untouched. His real argument rested on the principle of economy. If the present system does bribe men to stop away from the Navy,—if it has that effect, the present system is indefensible. It is money thrown away; and if you cannot get men to come even after they are in the reserve, it is money thrown away again. These are the questions to be discussed. Because you will never get two men to agree as to the number of men that you require in any given war. But the principle of obtaining a reserve is really one that you can discuss, and arrive at a conclusion that will be worth something. The others will be mere opinions, the vaguest opinions, that will be worth nothing. It struck me that that was the line Mr. Reddie was taking; and I think it would be quite worth while rather to consider that in any future discussion, than to go off about numbers, which really, to my mind, amount to very little. Nevertheless, I am sure you will allow me to thank Mr. Reddie for his paper.

Captain SELWYN: Perhaps the meeting will allow me to say a few words on this subject, as I shall probably not be able to be here on another evening, and I have turned my attention to it for several years past. I hold in my hand a pamphlet which was republished from the *Nautical Magazine*, about six years ago, and which I wrote with reference to this special question. While I entirely agree with the Chairman that figures and facts may be made to take any face or any formation their manager chooses, like soldiers, I also agree with Captain Dawson, that we are very far from having a sufficient number in the Naval Reserve, while I dis-



agree with him entirely as to the constitution of that Naval Reserve. The first thing that we ought to lay down as a principle in this case is that our reserve of seamen for the defence of the country ought to be co-equal—never should be less than the whole available force of seamen, who call themselves Englishmen, or English subjects. The next question arises, how shall we obtain them, with the least stress during war, with the utmost facility during peace? As to figures, I might go over the question as to the size of our ships now requiring more men, as to prizes being taken requiring more men to man them, and as to a thousand different points in which the figures may prove to be utterly fallacious. I do not go into those. I utterly refuse to go into figures referring to ten, twenty, forty years ago, as being in the slightest degree satisfactory to-day, any more than to calculate the wages which a labourer had forty years ago would be a fair or just measure of what we owe to our seamen now. It is the fact that the price of all skilled labour has gone up, and that if you wish to be well served you must not ask how little you can give, but what is the fair market value of such labour, and what therefore you ought to pay for it. With these preliminary remarks, if gentlemen will permit me, I will just read one or two remarks referring to what I believe the true system:—"Let lists be opened at all the ports of volunteers for the Navy under a new system, to be continued till the total number so enrolled reaches, including those actually serving in the Navy, or so many of them as choose to enter, the number of 100,000 seamen, or any other number deemed sufficient for all war purposes." I say, take them if you can co-incidentally up to the full amount of men serving in Great Britain and her colonies:—"Then each year estimate the total number required for the service of that year; place them on full pay, and use them as required. Let the pay be a fair remuneration, a fair market price, for such labour, and not made up of pennies here and pennies there, which a favourite may get, and a faithful drudge may miss—and adopt some more simple plan of provisioning than giving a man more than he can eat, and paying him the difference. Then, let the remaining seamen have leave for one, two, or three years"—(this you must recollect was written some six or seven years ago; to a certain extent, you will see how far it is in accordance with the present ideas)—"with the understanding that a retaining fee, a sort of half-pay, will be accruing to them during their absence, and will be paid to them on their return within the specified time—to be forfeited if they do not so return. If war be imminent, retain all who are coming home, and let no more go out. I need scarcely expatiate to any one who knows the habits of seamen on the security of the moral tie you would thus have to the absentees, nor on the well-known fact that the best seamen are those who have been everywhere, and seen everything, aye, from a fishing boat to a pirate. Having by such means made the entry to the Navy a boon, we may then easily keep up the discipline in it to the highest point, although reducing the corporal punishment to the lowest possible amount, by conferring on all captains and officers commanding a full power of discharge of *proved* and incorrigible offenders, without any other check than this:—that an officer commanding, the discharges from whose ships were constantly in excess, should be always liable to be displaced from the command, after fair trial. Officers under the present system will do one of two things: either they will make 'cooked' returns—I hope this is not often the case—or they will abstain from punishment where they know it ought to be inflicted—that those returns may not seem unduly large. I will put a case. A leaves a ship from ill-health or other causes, in which his mistaken kindness, or easy temper, or the cause I have before mentioned, has induced a slackness of discipline, under which no ship can be 'smart' or even 'happy.' B relieves him, puts on the screw, and finds to his disgust that his punishment returns being large, are animadverted upon in no pleasant terms by his superiors. The natural result is, that he says, 'Oh, it's no concern of mine, I didn't love punishment. Let the discipline go to the dogs.'" That is a point that I ought not to enter upon, as it affects discipline. But recollect the discipline of the Navy, and the way in which it is kept up affects the way in which you get your men.

Mr. REDDIE: I did not go into "grievances" or discipline, because I was prepared to show that the discipline is not at all complained of by our seamen. It does not affect the question; and therefore I did not go into it.

Captain SELWYN: I have only further to remark that if you cannot induce seamen to enter from the merchant service by their knowledge of that service, you have yet a possibility of making seamen in excess of any demand. You may train boys; you may even recur to what the absence of I have heard lamented over and over again by the mercantile navy, the apprenticeship system. That apprentice system did its work. It did its work in many ways, for which we cannot now find a substitute in any sort of way. It quietly and unobtrusively prepared our boys for seamen, and our seamen for the Navy. It brought them up in habits of discipline which no seamen in the merchant service is ever subjected to, and which in the case of boys is invaluable, no matter what business they are afterwards engaged in. It gives them a power of self-denial and a power of working together, which, if not learned in boyhood, is never learned afterwards, and which, with the men we now get, who begin service at sea much later in life, we can never hope for, except perhaps with the warrant officers. I might add to that a recent instance which has come under my notice of the impolitic way in which our warrant officers are treated. For I find it has become a practice of late years with subordinate officials to ignore the legitimate claims of warrant officers. I hold in my hand a letter in which it is said it is not the custom to confirm in certain cases. Therefore, a man who had every claim to be confirmed was not confirmed, but was met with excuses all through. Instead of looking into the question, they disgusted this man, and that man may in consequence keep thousands of men away from the fleet, for every man disgusted takes his disgust with him all over the country. Thus, the system which is pursued in an office in London may be productive of infinite loss. We must at least beg that red tape may be abolished, that the foolscap may be reduced, and that however valuable statistics may be, they may yet not be held to supersede facts.

The CHAIRMAN: Any gentleman wishing to take part in the discussion by calling here ten days hence, will be furnished with a copy of the paper. The discussion is adjourned to Monday, the 25th.

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#### ADJOURNED DISCUSSION.

Monday Evening, February 25th, 1867.

CAPTAIN E. GARDINER FISHBOURNE, R.N., C.B., in the Chair.

The CHAIRMAN: As there may be some gentlemen present who have not heard the paper, and who have not had the opportunity of reading it, I may say in a few words that the subject was "Manning the Navy." The subject was divided first of all into the classes of boys, marines, stokers, and seamen. As the boys were stated to be 7,000, a number sufficient to keep up the waste of seamen, it was not necessary to discuss that point. The marines being, of course, a standing force, it was not necessary to take them into account. Then, there were 13,000 stokers and artificers, who do not enter into the discussion. The discussion, then, is limited to the fact of 22,000 seamen being, according to Mr. Reddie's estimate, the minimum force for ordinary service in peace time. In addition to that, Mr. Reddie divided that question of seamen again into a minimum force, contingent force, reserve, and war levies. The minimum force was for peace service. The contingent force was in case of little wars and warlike demonstrations. The reserve had a distinct understanding that they are not to be called out except as war levies. It is supposed that the contingent force, that you may want for a little war, or for a warlike demonstration, is to be drawn from the mercantile marine of the country. In addition to that, the war levies over and above that which is absolutely necessary—I mean over and above the amount of reserves—will also have to be drawn from the mercantile marine. Mr. Reddie went on to say

that he considered the present Naval Reserve, defective in several points: Firstly, as not furnishing a contingent force. Secondly, as tending so far to a higher rate of wages; the Reserve are receiving a bonus, in addition to their ordinary wages, as a retaining fee, which makes the wages of the Reserve higher than the wages of the Navy; and, so far, tends to keep men out of the contingent force. Thirdly, he argued that, as compared with men-of-war's men, the training was insufficient. Fourthly, he contended that they were expensive. Fifthly, it was rather doubtful whether, when they are called upon, they would be forthcoming: first, because the waste is so considerable. Thus, for instance, there have been 21,000 men enrolled in the Reserve; nearly 5,000 of them, that is 25 per cent., have disappeared. Well, if that were continued over ten years, it is to be gathered that the men who are now in the Reserve will all have disappeared by that time, so that if you have a Continental war at the end of ten years, the question is, where will the men be whom you have been paying. The next objection that Mr. Reddie had to the present arrangement was, that as the Reserve are now receiving a higher rate of pay than the Navy, if they were called out, they would be called out to serve for a lower rate of pay than they are receiving. Therefore, he considered that it would be indispensable, either to expect them to serve at a lower rate of pay, or else you would be obliged to raise their rate of pay, and doing so, you would be obliged to raise the pay of the whole Navy. Another question which was not dwelt upon by Mr. Reddie is a very important one. It is one that is stated in the tables that he has laid before the meeting. It is this, that in 1813 you had 147,000 seamen, all told. At that time there were only 167,000 in the mercantile marine from which to draw your levies, or to obtain any increase that you might want. At the present time your total numbers are 69,000 seamen, and 350,000 men of the mercantile marine to draw from. And that does not represent the whole, inasmuch as these numbers only represent those in registered vessels. The question, of course, suggested is: If you did without a Reserve in those days when you were under such disabilities from the small number of men in the mercantile marine, is it necessary to have a Reserve now? These are questions for you to discuss. And as they are so important, if gentlemen would kindly refrain from entering upon collateral questions of comparatively little importance, it would tend very much towards getting a verdict upon these important points.

MR. REDDIE: Before proceeding to the discussion, I should like to make a slight explanation as regards this statistical table. I am indebted to my friend Captain Heath, R.N., for pointing out one inaccuracy in it,\* which arose from my sending it to the press hurriedly. The title of the second column from the end, showing the numbers actually serving in the Navy should not be "Borne in H.M. ships," but "Actually serving," as it includes the marines on shore. It includes 8,000 in round numbers of marines on shore. With reference to your interesting *précis* of the issues, I only venture to say that you have gone slightly beyond me on the points that I brought forward. For instance, about the waste in the Reserve, I must appeal to my paper.

THE CHAIRMAN: I must say Mr. Reddie did not state what I have said. I have overstated it. It is matter of fact what I have stated to you, that 21,000 men were enrolled in the Reserve, and 5,000 have disappeared; if I remember, 1,500 by death. About an equal number have not come forward to be re-enrolled.

REAR-ADMIRAL A. P. RYDER: I am sure we must all be exceedingly indebted to Mr. Reddie for his kindness in coming down and reading a paper, which took a long time to read, and which must have taken him much longer time to prepare, and also for the tables which he has drawn up, and which are exhibited on the upper curtain. But I think we owe a debt of gratitude to other persons besides Mr. Reddie. We owe a debt of gratitude to the Lords of the Admiralty for,—I will not say sending Mr. Reddie here to instruct us on this point,—but for allowing Mr. Reddie to come down and to bring with him all these statistics. I have no doubt he has brought down with him everything that he thought would be interesting, or that would bear upon the question. I think we really do owe a debt of gratitude to any Public

\* See folding table, Appendix A, Table 1, now corrected.—ED.

Department that allows such important questions as these to be brought forward by its Officers. I feel specially grateful to the Admiralty for allowing it, because it is a question that I have been working at for the last four years, and I have always felt myself to a certain extent tied down in the matter, because I obtained my statistics from a public board while I was on full pay, and had opportunities of getting them; therefore I have never felt myself free until now to speak publicly on the question, or to take any public notice of it. Mr. Reddie having come down with the permission of the Admiralty, I now feel perfectly free to say everything I know on the point, and to make what suggestions appear to me to be best. I may premise that with the exception of the latter part of Mr. Reddie's paper, in which he speaks, if I remember aright, of apprenticeship in the merchant service, and of the advisability of having training ships there, and in which I perfectly agree with him,—with that exception, and I am afraid it is almost the only part in which I do agree with him,—I differ very widely from him in other parts. I think in a discussion of this kind, where you must take so very much for granted, both from Mr. Reddie and from myself, it is well that those gentlemen who are present, who probably have never heard my name before in their lives, and possibly never heard Mr. Reddie's name, that they should know very shortly what are the qualifications that we possess to enable us to discuss this point. Mr. Reddie is, as he told us in his paper, and as we know, an Officer in Somerset House, a civil Officer connected with the Navy. I think he said, I am trusting to my memory now, that he had been twenty-seven years in that department. Therefore he is a public Officer of great experience, and he has risen to be the head of one of the three great Departments of Somerset House. Of course, everything that falls from him on a question of this kind is entitled to our confidence. I should tell you that in my case I commanded the Coast Guard and the Reserves for three years, up to about nine months ago. From the time I had command of that force, I took, as it was right I should do, a very great interest in everything connected with the Reserve, and everything connected with the waste of seamen, and with the supply of boys, because the arrangements for the supply of boys was to a great extent carried out by Coast Guard officers. The Coast Guard were ordered to recruit boys, and therefore the whole question passed to a great extent through my hands. I determined to master the subject, and I think I did so; and I was in constant communication with the Admiralty on the point. When questions of this kind are brought before you, and, as I have said, you are to take a great deal for granted from each person who discusses it, you ought to know their antecedents connected with the questions brought before them. Mr. Reddie, coming from the Accountant-General's Office, of course comes here with great experience as an accountant; and unless we know to the contrary, I think the impression given to all persons listening to him and to his paper will be (not that he intentionally gives that impression himself), and I have no doubt he will rise and deny it, but the impression which will necessarily be given to all persons who go away from here having heard his paper, will be that he gives the opinion of Somerset House; that he gives the opinion more or less of the Accountant-General of the Navy. Mr. Reddie will of course deny that, and say, "I am merely giving Mr. Reddie's opinion." But I think he will agree with me, that that is the impression that may be taken away from this room.

MR. REDDIE: Mr. Chairman, Will you allow me to rise to order? Admiral Ryder knows that when the question of discussing this subject in this Institution was mooted, I was most anxious that he should read a paper himself. The Accountant-General of the Navy never communicated with me, nor I with him, upon this subject. I speak here for myself, and I rely upon the merits of what I have brought forward. Having been requested by the Council of this Institution to read a paper, and having asked the permission of the Lords of the Admiralty to read it (not one of the Lords of the Admiralty knowing in the least what I should say), I have done so; and Admiral Ryder knows all this to be the fact.

THE CHAIRMAN: It was proposed to me to contradict a statement, that has been made that Mr. Reddie was put forward by the Admiralty. I did feel that such an anonymous statement ought not to be taken notice of. And I have no right as Chairman here to allow such an imputation to be made on the Admiralty that they had any intention either improper, or what really from the style of the remarks would imply,

dishonest. Therefore I did not take notice of it. I said to the Secretary, the proper course to adopt was, that any gentleman, who had the impression that the Admiralty had any intention in putting Mr. Reddie forward, should ask a straightforward question on that point, and he would get a straightforward answer. To act otherwise is to prejudge the whole question. I have consulted Sir John Hay upon the subject, and I am authorised to state that the Admiralty permitted Mr. Reddie to give the lecture, but that they are in no way pledged to his views.

Admiral RYDER: What I was about to say was this: I repeat it, although this explanation may make some difference in the matter; but for the explanation, persons leaving this room would inevitably consider it highly probable that Mr. Reddie's paper, *minus* his explanation and denial, would carry with it the weight of the Accountant-General. They would not be able to say positively, but they would not know, that it did not, and they would think it highly probable that the Accountant-General agreed with him, as it is not unnatural that the two chief Officers in a Department like that, should agree. What I am going to say is this, that without breaking any confidence in the matter I can assert that the opinions of the Accountant-General given in official letters which came under my eye, and which I now feel myself free to allude to, were distinctly at issue with Mr. Reddie's opinion, as stated in his paper. (MR. REDDIE: At issue? Admiral RYDER: At issue. MR. REDDIE: Then I do not represent his views.)

Admiral RYDER: You will have abundant opportunity of reply. I say, when statements of the kind which I have drawn up, representing the views which I am about to bring before you, were sent to the Accountant-General to report upon, his report was this, that he went further than I did in his estimate of the great falling off in the number of seamen, and the very insufficient supply of boys, and the disastrous effects it was likely to have upon the Navy. I think that is a perfectly proper thing, and germane to the point for me to state. And I state it that I may destroy any *prestige* which may accompany Mr. Reddie's paper, and which, as I have said, might probably be the case, if people left this room without the explanation I have given. There is another *prestige* which Mr. Reddie may have, and that is this. I believe the Navy Estimates were printed two or three days ago. Perhaps, Mr. Reddie will kindly tell us how many less men were voted, and how many more boys, if it is no secret. Can you? I won't ask you if you would rather not state it.

MR. REDDIE: I can only say that when I read my paper here, I had not seen the estimates. The Navy Estimates were not then published.

Admiral RYDER: Can you tell me, as a fact, how many more boys are to be voted?

MR. REDDIE: I have now got the estimates here. There are a few hundred more boys.

Captain HEATH: The difference is trifling,

MR. REDDIE: I thought we were discussing my paper, not the Navy Estimates, nor the Accountant-General's department.

Admiral RYDER: Not the Accountant-General's department. We are discussing your paper. It is perfectly open to Mr. Reddie, perfectly right for him when he gets up in reply to say, "Admiral Ryder and I differ widely as to the number of boys that ought to be sent into the Navy every year." But you, gentlemen, who will go away not able to master the subject entirely, and who are taking a great deal on credit from both of us, when you look at the estimates for this year, will see what the Admiralty propose to vote this year, and you may say, "They have not taken Admiral Ryder's views, which it is said he has been pushing forward so long, but they have taken Mr. Reddie's views. They are only taking a few more boys than last year, and they are taking some few less seamen." Now, I do not intend you to leave this room supporting Mr. Reddie's views. I know from some experience at the Admiralty, extending over three or four years, that anybody who draws the conclusion that because estimates are taken for a certain number of men or boys, that that represents the real views of my Lords on the point, *will make a grievous mistake*. My Lords' estimates, after they have made them, are constantly altered, from having to deal with the Treasury. They are altered and cut down, after their own opinions are fully expressed. Therefore, if Mr. Reddie uses this argument, I leave you to attach what weight to it you like. I attach none! Having

made these remarks, I now come to the question of the paper. Mr. Reddie's paper may be divided. He gives a very great deal of interesting information about the votes in the last French war, and so forth. But the principal part of his paper was connected with the Reserve, the waste of seamen, and the supply of boys. Now with regard to the question of the Reserve, having commanded it for three years, I should like to make a few observations to you, as to what I think of the Reserve, and what value I attach to it. You are aware that it numbers about 16,000 men. You may see two diagrams on the wall. Diagram 2, Appendix B, represents the addition every month to the Reserve, beginning from the month in which it first started, and coming down to this month. Diagram 1, Appendix B, gives you the months all added together. So that you can see by the different lines drawn upon it how the Reserve has varied, and the number it has reached. An interesting fact will be pointed out to you in the upper diagram (2), which I shall allude to presently. I have visited the seaports where these men are drilled; I have visited the batteries along the coast where they are drilled; and I believe them to be a thoroughly valuable body of seamen. I believe that they are orderly; the punishment among them is ridiculously small. When you consider there are about 16,000 men in the force, and always on an average about 1,400 under drill, I think the punishments are ridiculously small. They were zealous in doing what they were told to do. I have often asked Officers to go down with me, or without me, to the "President" in the West India Docks, to see how these Reserve men drilled. On one occasion I took Captain Ewart of the "Cambridge," an experienced gunnery officer, and asked him to see these men at drill. He was delighted with the way in which they worked, and the knowledge they showed of the gun-drill, the musketry-drill, and the cutlass-drill. I believe that the Force is the most economical Reserve that we could have. When you consider the number of Officers which I will mention presently, and the number of men in it, and the necessity, which Mr. Reddie has entirely overlooked, that *all Reserves must have their periodical drill*, I think I am right in saying he has overlooked it, because he takes credit in his proposed Reserve for a great economy on the score of their not having any periodical drill. Of course, Mr. Reddie, sitting in his chair at Somerset House, does not enter into this kind of question, as to what drill these men require. I dare say he looked at it from an accountant's point of view, and thought that what was called a drilled man would want no more drill, just as if a man who had had his dinner would want no more dinner. We differ in that respect. That is my opinion of the Reserve. Now, the next question is, what Mr. Reddie proposes to do with the Reserve. I think I am not wrong in saying that there were two statements which he has made with regard to the Reserve. I call the first, "Mr. Reddie's suggestion to the Reserve." I have no doubt Mr. Reddie will say, "I never intended to make any such suggestion to the Reserve." I am willing to believe that he did not. It only shows that people should consider carefully what meaning may be put, and very easily put, upon their words, before they use them. I now read it:—"If these men are backward in coming forward to fulfil their agreement under these conditions, it may be a question whether they will be held to their agreement." I say that that will be understood to be a suggestion, not intentional, of course, on Mr. Reddie's part, but a suggestion to the Reserve, that when they are called out, if they are backward in coming forward, they will stand a very good chance of not being held to their agreement; which by the context, if you look at Mr. Reddie's papers, means that when their services are required, if they are only "*backward in coming forward*," they will probably be induced to come by a promise to give them their retainer (£6 per annum) afloat. I do not command the Reserve now; therefore, perhaps other people who belong to it, and who are in this room, might speak more properly in their name than I can. But if I did belong to the Reserve I would repudiate the suggestion in the strongest possible manner. The men who belong to the Reserve are, I believe, as honest, patriotic, and loyal as any other body of Englishmen. I think they will not thank Mr. Reddie for his suggestion. Mr. Reddie goes on to make what I call his "threat to the Reserve." He says, "if the Reserve impedes the manning of the Royal Navy, and if the Naval Reserve places the merchant seamen who enter it at a great advantage compared with the seamen who are actually doing us service in Her Ma-



"jesty's ships, then it might be the duty of Parliament and of Government, even, to abolish the Reserve altogether; or, at any rate, that any fresh or more equitable terms which might be deemed advantageous for the interests of the country, might fairly be offered even to the men now enrolled, leaving them, of course, quite free to quit the Reserve, or to continue in it on the new terms at their option." Now, as I understand that, and we know various meanings may be given to the same words, it means but one thing; and that is, that in Mr. Reddie's opinion the Reserves have got too good terms; and that, under certain circumstances, if such and such things in the beginning of the sentence are considered to have taken place, then this option shall be given to the men of the Reserve; not, mind you, that they are either to leave the Reserve or to take the new terms, or to remain during the term of their natural lives, or during the term they are at all available for the Reserve on the conditions they have now, which latter would have been a perfectly fair offer, and a right thing for Mr. Reddie to say. I think you will see I am not going beyond the mark at all in stating that what Mr. Reddie says is a very different thing, indeed. He thinks the Reserve have had *too good* terms. He suggests that under certain circumstances, they should have *worse* terms offered them; and he suggests that if they won't take them they shall quit the Reserve. Now, I call that a threat. I perfectly agree with the Chairman in the conversation he had with me before the meeting, that he did not for one moment suppose the Lords of the Admiralty are in the slightest degree a party either to the suggestion or to the threat. And nobody holds that opinion more strongly than I do. But I say, as I said before, that Mr. Reddie's coming down here from Somerset House and making use of these statements, will lead, and has led, to misconception. For there are gentlemen in this room who will tell you of letters received from the different seaports. I have myself seen newspaper leading articles upon the point; they all go at once to this:—"What are the Admiralty about to do? Surely this is a feeler. Mr. Reddie has been sent down to this Institution in London to throw out a feeler on this point, 'that their Lordships are about to destroy the Reserve, or to give them the option of taking new and worse terms, or leave the force.'" Of course, Mr. Reddie is not speaking for the Admiralty, and he is not speaking for Somerset House; he is only speaking for himself in the matter. I think that that should be known thoroughly in all the seaports; and I hope their Lordships, in their wisdom, will take such steps as may seem to them necessary to remove this impression which has got abroad. I have written certain statements (pointing to those on the walls), and I have used the word "we," which is not an uncommon word to use instead of the word "I." I do not think anybody need take objection to the word "we." We do not in this Institution bind any one to anything that is said; we do not bind the meeting. The Chairman will not get up and ask you to hold up your hands one way or the other. He will get up, perhaps, and "sum up;" but the Chairman's summing up does not bind the meeting. What I have put down in these statements is what I think myself, just as what Mr. Reddie says, is what he thinks. Mr. Reddie comes down here hoping to win the approval of those who hear him, and that they will go out of the room concurring with what he has said. I hope so, too; as to what I am going to say, I hope those here who listen to me, or the majority of them, will agree with me in the matter. This is the way I would sum up what I think about the Reserve:—"Although the existing Royal Naval Reserve may be improvable in various matters of detail, it is deserving of our confidence and that of the country, because it exists in reality, and not merely on paper (which is the position of Mr. Reddie's Reserve), because it is composed of 16,000 British seamen, of whom about half are always in Great Britain, and the rest return at the rate of about 1,000 per month." There are two gentlemen in this room, Mr. Gray, the Marine Secretary of the Board of Trade, and Mr. Mayo, Registrar-General of Seamen; they are both thoroughly up in this matter, and I hope they will make a few remarks after I have finished, and confirm my statement, or point out where I am wrong. Then, I say:—"Because we believe that the men are carefully selected, are orderly, contented, zealous, patriotic, well disposed towards the Royal Navy, and that they will strictly fulfil their engagements, and will not be backward in coming forward, notwithstanding any suggestions

"to the contrary that may be made to them from whatever quarter." I have used the word "patriotic;" and I said I would refer you presently to that upper diagram (2), and I will do it now to illustrate that point. When the news came to England in November, 1861, of the outrage on board the "Trent," the Naval Reserve had been in existence about two years. As soon as the news was well promulgated round the ports, what did the merchant seamen do? Those who abuse the Naval Reserve—and I am sorry to say there are some among my brother Officers who have called it a myth—I say those gentlemen, if they were consistent, would naturally expect that, when news of that kind came, the entries into the Naval Reserve would rather fall off than otherwise. It would be natural to think so if the Reserve was merely taken up just to make a little money at the time without any real intention of coming forward. But what did happen? In four months following 3,500 men entered. I think you can see from all parts of the room those long black lines in the upper diagram, stretching across the paper, the longest one represents 1,000 men. The space between those up and down black lines are 100's. Those four long lines which are the longest lines on the sheet, represent the entries, and which came in after the outrage on board the "Trent," represent, in fact, 3,500 men—one-fourth of the whole Reserve. Now, I say that shows a thoroughly good feeling on the part of the men in the merchant navy. There are 20,000 foreigners, I am sorry to say, in the merchant navy, and it is not likely that there are any of these in the Reserve. There are also in the merchant navy, men of indifferent character—men who are troublesome fellows; they are not in the Reserve. But the better class of merchant seamen are, I believe, thoroughly patriotic, and would come forward to join the Reserve if anything of the kind takes place again. One Officer in particular, and I know his case is not an uncommon one among persons who have not studied the subject, said to me, "A gentleman went down to Hull at this particular time, when the 'Trent' business took place, and called a meeting of the Naval Reserve. 'I do not know if he was authorised to go down or not, but he asked them all to come forward and put down their names, to join the Royal Navy, and not one came forward.'" "That," he said, "showed a want of patriotism on the part of the 'Naval Reserve.'" I contend it showed nothing of the kind. These men entered into a solemn engagement, which they do not regard lightly at all, to hold themselves in readiness to be called out whenever an emergency takes place, and war is threatened; and why should they break that engagement and come forward and enter the Navy? There they were *en bloc* ready for service. I contend it was no test at all of loyalty. The test of loyalty was on the part of their brethren and relatives, merchant seamen, who came into the Reserve at that moment, showing that they were perfectly ready to be called out when wanted. Then I proceed to say:—Because we believe the assertion that they are well drilled and are as expert in the various gunnery exercises as circumstances will admit. I allow that you must take this opinion for what it is worth, it is my experience for three years constantly visiting drill ships and batteries. Because we believe the assertion of the Duke of Somerset, in the pamphlet Mr. Reddie so often quoted, "That the 'creation of the Royal Naval Reserve has brought the mercantile marine into close connection with the Royal Navy, and has tended to remove prejudices which in former years seriously interfered with the manning of our fleet,'" as for instance, in the Russian war. And again, "we have no confidence in Mr. Reddie's proposal 'for a Reserve.'" We do not believe that any sufficient number of men-of-war's men will be forthcoming to form his Reserve, or that they will accept his terms and conditions, or that his Reserve will be "economical." Now, we have in the existing Reserve a great fact. But in proposing a new Reserve, its value must be a question of opinion. It is Mr. Reddie's opinion that he would form, he would not say how large a Reserve, but that he would form a Reserve. I have thought over it a great deal, and I have had some experience in the matter from commanding the Reserve. I have talked it over with persons who have had the same experience, and I do not see any prospect of any number of men being available for Mr. Reddie's Reserve. They are leaving the Navy very quickly already. I do not think Mr. Reddie's terms are very tempting. He does not propose to give them any drill pay or subsistence money, for he does not think they want any drill, and he cuts off thus three shillings a-day

for a month at once, and he proposes a most onerous addition to the conditions, viz., that "they shall be called out whenever they are wanted,—and not only in case of "emergency." Whenever there are wanted, say 100 men, the Admiralty will have to send down to Liverpool or Dundee, and will put their hands on these 100 men. Or, supposing two or three hundred men are wanted to commission a couple of frigates, the same course will be adopted. It sounds a very odd way of managing it, but somehow or other he would attempt this way of getting these two or three hundred men out of his Reserve. I do not think his Reserve will be formed. I do not believe the men will accept his conditions. Then, I add:—Every Naval Reserve, whether composed of merchant seamen or of men-of-war's men, must have at the least one month's drill every year. We are of opinion, that under these circumstances the existing Royal Naval Reserve, which costs about £200,000, which secures the services of 114 lieutenants, 80 sub-lieutenants, and 16,000 seamen, is a most economical force. I do not believe—it is matter of opinion again—that you will get anything like so valuable a force for the money in any other way. Then:—Finally, we deeply regret that statements made in the paper that has been read in this Institution should have given rise to the belief that the Admiralty are contemplating the "abolition of the "Reserve altogether," and that this is to be done by giving the men in the Reserve the "option of accepting new terms more advantageous to the interests of the "country, or quitting the Reserve." I have already spoken to that point, and I will not repeat what I have said, but I proceed:—As this paper was read by a gentleman holding a very high position in one of the Civil Departments of the Royal Navy, it is much to be desired that the proper steps be taken to remove this impression, as in our opinion the forcing of the above-named option would be breaking faith with the men now in the Reserve, and could be justified by nothing short of national bankruptcy. That is my opinion, and I have given you my reasons for holding it. I have now said all I wish to say about the Royal Naval Reserve. We now come to the question of the waste of seamen, and I may tell you here that these Tables I and II, Appendix B, which are made in a different way, and put together, I may say in a different way to a certain extent from Mr. Reddie's, all either come from the Admiralty or from Somerset House, or they have been checked at Somerset House, having been sent there for the purpose. There is an exception, perhaps, in one or two cases in the lower line, where, of course, from only being able to get the facts lately, those lower lines in some cases cannot have received that check. In all other cases they have been carefully checked, and therefore, as far as the statistics go, I stand on the same ground as Mr. Reddie himself. With regard to Table I, Appendix B, you will see if you can read the heading, that that is arranged to show the loss or gain of continuous service men, and of non-continuous seamen, every month from the 1st of March, 1864, to October, 1866. I should like you carefully to look at that table, and you will see the way in which continuous service men are pouring out of the service, and the non-continuous service seamen, the same. If you look under column two, you will see the decrease each month of the continuous service seamen, and under column five you will see the decrease of the non-continuous service seamen; and in the other columns, three and six, you will see the increase. At the bottom you see the summing up and total balance. You will see that in the thirty-two months, included in that table, there was a reduction in the number of continuous service men of 1,834, viz., decrease, 2,661; increase 827; making altogether a diminution in the number of continuous service men of 1,834. In the same way we find there has been a reduction of 1,295 non-continuous service men, making a total reduction of 3,139 *bonâ fide* seamen. During the same time, about 4,000 boys were rated seamen. This is what you must bear in mind, that when we find a large decrease of seamen going on, you must ascertain not how many seamen have really left the service, but what has been our real loss. You must always therefore add the number of boys that have been rated seamen during the time, to the diminution that has taken place in the number of *bonâ fide* seamen. The number, therefore, that represents the waste of seamen, as it is called, amounted in those thirty-two months to 7,139 men, continuous and non-continuous service men, and that if you divide—

The CHAIRMAN: Why do you add boys?

Admiral RYDER: If boys are rated men, they step into the vacancies of seamen that are gone. You will find 12·7 per cent. has been the waste of seamen during those 32 months. Now Mr. Reddie estimates the waste of seamen, as you see in his pamphlet, at 10 per cent., and he arrives at that, by means which I will explain to you in one of the tables which I shall show you presently. I differ with him and call it 12·7 per cent.

The CHAIRMAN: Per annum?

Admiral RYDER: Yes.

The CHAIRMAN: Not every 32 months?

Admiral RYDER: No, per annum. In estimating the waste that has taken place, and being desirous of making your arrangements for recruiting the waste for the future, you must of course not omit any sort of waste that you feel certain is likely to arise immediately. Now with regard to the Coast Guard, with which I am familiar, this is its position. The Coast Guard was under the Custom-house up to the time of the Russian war. After the Russian war it was placed under the Admiralty, and they found so many old men in the force that they sent round the then controller, Commodore Eden, who cut the force in two, and placed the younger men on what was called the fleet list, and the older men were called civilians, and placed, so to speak, on one side. We have since been recruiting the fleet list by young men, but of course the force being ten or twelve years older, we are gradually increasing the mean age of that force year by year; and they are just now beginning to pour out, if I may use the expression, owing to their having now become an older force again. Now I carefully estimated the probable drain on the Coast Guard force, and this must be replaced from seamen afloat. The waste of 12·7 refers only to what has taken place as regards the seamen afloat; by my estimate about 380 men would be required annually for the Coast Guard ashore from the service afloat to recruit them, which amounts to 1·8 per cent. on 21,000 men afloat. And therefore, by adding those two together, that is to say, the existing waste which has been taking place for the last 32 months, to this waste which is just beginning to take place, because remember, when we enter boys to-day, it is to make seamen three years hence—adding, I say, that 1·8 per cent. to 12·7, you get what I consider to be the real waste that we have got to allow for, which is over 14 per cent. If anybody chooses to take the trouble to follow my steps when they get that table when printed in the Journal, they will find a very curious result. They may measure the strength of that stream, if I may so call it, at different parts, and they will find, to use Mr. Reddie's expression, a curious persistency in the way the drain runs. If they take it in the middle, at either end, altogether, or straight through, they won't find any very material difference in the rate at which the men are streaming out of the Navy. I have taken it there from May to April—twelve months, that is to say, the financial year, 1865-66, and it is 12·7 per cent. I have taken it (because some people have said "You must not go so far back") for the last six months, from April to October, and I find it comes to 13·5 per cent., varying never more than one per cent., and therefore I assert that the waste for which we should estimate is, at least, 14 per cent., and not 10, as Mr. Reddie stated it. Mr. Reddie's answer to that is this (I think I shall not misrepresent him in saying that this is the answer, for he has given it to me before), "What we calculate at Somerset House 'when we are told to state to the Admiralty what has been the waste is this, we only 'take into account the 'casualty waste,' which waste arises from, I think, 13, 14, or at 'all events, a very large number of different sources—streams, so to speak, that are 'running out of the service, viz., invaliding, death, discharge to sick quarters on the 'shore, desertion, discharge with disgrace, discharge as objectionable, by purchase, 'on pension, from order, on request, for incompetency, and discharge of continuous 'seamen refusing to renew their engagement on shore.' These, I believe, they call at Somerset House the casualty waste, and they—he is perfectly right there—amount to about 9·5 or 10 per cent. 'But,' says Mr. Reddie, 'you have taken into account the paying off waste.' That is to say, the number of non-continuous service men who have left the service on paying off and have not come back again. 'I,' he says, 'took no account of that. That results from the action of the 'Admiralty, and you need have nothing to do with it. The Government choose to

"take a lower estimate for the year; the Admiralty, obliged to follow suit, must pay off more ships than they would otherwise do, and, as is the fact, the Admiralty issued an order that no ship in the home ports should enter any men from the shore. And therefore," Mr. Reddie says, very naturally, "the Administration squeezed these men out of the service. It was not the men's fault; they would have come back if they could do so, but the Admiralty did not allow them—would not admit them on board." But it so happens, and this fact Mr. Reddie was not aware of, for he told me when I mentioned it to him, that he had never heard of it before; it so happens that when the Admiralty gave that order with regard to the home ports, they sent for me then, or shortly afterwards, as I was commanding ten or eleven large ships situated near to the home ports—one situated near Portsmouth, one near Plymouth, one close to Sheerness, and others round the coast, near where the seamen go to their homes, and told me to enter them as fast as I could, and report the entries periodically. And therefore I say that this squeezing men out of the service did not exist. The men were perfectly free to have come back into the service if they liked to do so, because there were always a number of vacancies in the Coast Guard ships (seven hundred was the aggregate number), for as fast as the men had served one or two years in Coast Guard ships, they were drafted into sea-going ships, so that there were always a number of vacancies created, and we tried all we could to get these paid-off men to join. As a general rule they did not choose to join, they did not wish to join, and therefore the loss on paying off, as I maintain, in opposition to what Mr. Reddie says, is a waste that ought to be allowed for. In the first place, I do not know what his view may be now, but when he did not know the fact of the order having been issued, he held the view that this ought not to be accounted waste. Now I maintain, as the men could always have come back if they liked, it is a legitimate waste, and runs up the total to 14 per cent.

The CHAIRMAN: Do not other men come in to supply their places?

Admiral RYDER: If you take the numbers from the top to the bottom, you may say of John Smith "How do we know John Smith did not come back, but that is "no proof." Compare the numbers, you find, the numbers for 32 months, there are about 7,000 men gone, or 12·7 per cent. of 21,000 men per annum, partially replaced by 4,000 young seamen rated from boys, but the uncompensated waste is 3,200.

The CHAIRMAN: Do you mean to say the number of men actually serving is less each consecutive year?

Admiral RYDER: Yes. Look at the table. That is checked from Somerset House. That is the drain going out.

Mr. REDDIE: Part of these figures are our statistics; not all. You have given the men that went out, but you have not given the men that the Chairman speaks of as entering.

Admiral RYDER: I say the difference between the gross number at the top and the gross number at the bottom includes all entries and re-entries.

Mr. REDDIE: But we were reducing the votes.

Admiral RYDER: I say if every one of the men might have come back and did not, then the loss does not arise from the reduction of the votes.

The CHAIRMAN: Suppose the House had reduced it by 10,000, would you call that 10,000 waste?

Admiral RYDER: If there was an opportunity for the men to come back whenever they liked, and they did not avail themselves of it, your argument falls to the ground, that the men were reduced by the action of the vote. I am sure if you think over that you will see it. In Table II, Appendix B, which is also checked at Somerset House, you will see by looking at the columns, the points that Mr. Reddie has been speaking about—you will see the number of seamen who have left. You will see in column 6 the number of seamen who have entered and re-entered; while column 7 gives the difference between the entries showing the actual waste.

In column 8 you get the number of young seamen rated from boys; deducting that from the other you get the uncompensated waste, the actual loss all through, down to the latest statistics. As some people like to consider these statistics in percentages, I have arranged in Table III, Appendix B, the waste, &c., in percentage of the number of *bond fide* seamen who were in the service on the 1st of April each year,

and of course the percentages are derived from and correspond with the figures. If you choose to investigate it you will find that the percentages are reduced from those figures in columns 5, 6, 7, 8, and 9. I make this statement, and this is where Mr. Reddie and I differ so widely, I say, "The number of boys rated seamen annually, the number of boys entered in the training ships annually, the training ship accommodation, and the complement of boys in sea-going ships require to be about double what they were in 1865-66. The number of seamen rated from boys should be about 3,000, whereas only 1,470 were rated in 1865-66. The number of boys entered annually in the training ships should be about 4,220, while only 2,200 were entered in 1865-66. The training ship accommodation should be about 5,900, while less than 3,000 was the accommodation in 1865-66. The complement of boys in sea-going ships should be about one boy to four *bond fide* seamen; it was only one boy to seven *bond fide* seamen in 1865-66."

Those are the statements that I make and I am prepared to prove them. In Table IV, Appendix B, I have arranged the whole boy question. You will see "The annual supply of boys to replace the absolute *bond fide* seamen." "Number of years" in the first column, then the boys voted afloat and in training ships, then you see the boys in the service on the 1st of April, and you see the boys entered in the training ships each year, then the boys who leave the training ships for sea-going ships. The waste is about 14 per cent. while they are in the training ships. They remain 15 months in the training ships. These little cross lines give a rough idea of how many boys actually leave the training ships compared with those who join. If the first class boys are rated seamen after two years, which I think Mr. Reddie will agree is about the time we have supposed they are, the waste of boys in sea-going ships is 7 per cent. You may get confused if you do not look carefully into these percentages. The waste of boys while they are in training ships is about 14 per cent. In the last year it was a little over 13 per cent. The head of the training ship establishment estimates them at 14 per cent. The waste of boys after they get to sea having passed through the sieve of the training ship dwindle down to 7 per cent., but taking both together it is about 9 per cent. on the whole number of boys in both training and sea-going ships. In Table V, Appendix B, I place in juxtaposition the number of boys entered in each year, and the number of boys rated men each year, with the same lines to show the probable loss. We allow three years from the time they enter,—one year in the training ship, and two years afloat. It is very important to estimate what the waste of boys is, and I have carefully endeavoured to ascertain it from that table. It is well not to rely too much upon what may have taken place in the year immediately preceding the year which we are at present in, because we are likely to be led astray—we ought to spread our researches over at all events a certain number of years back, and as long as there are no extraneous circumstances, evidently showing us that we must reject certain years. I treat Table V in that way as far as regards boys. (It is a very different question from that of the seamen.) We may extend our researches as regards the boys, rather farther back, and we shall find that about 29 per cent. of every hundred boys who enter the training ships are wasted before they are rated men in sea-going ships. There is no material difference between Mr. Reddie's estimates of the waste of boys and mine. Mr. Reddie's estimate is 10 per cent., but he says he considered it considerably under 10 per cent.; well, my estimate, 29 per cent., for about three years, of course is about 10 per cent. per annum.

*The supply of boys to replace the waste of seamen.* Now here is where Mr. Reddie and I are at issue. Everything depends upon the way the number of boys are calculated to fill up the waste. I will give you, and I think correctly, Mr. Reddie's method.

MR. REDDIE: I may say, to save waste of time, that I did not go into those statistics, which I think relate more to Admiralty management than to the general question.

ADMIRAL RYDER: I consider it to be of the greatest importance. If only half the proper number of boys are entered, I think everybody will agree it is a question of the greatest importance. Mr. Reddie's method of estimating the waste is this, he says, the number of seamen being 22,000, the waste that we are endeavouring to



recruit for will be 10 per cent., to be replaced annually, or 2,200. The number of boys voted last year was 7,330; take off 10 per cent. from that, and you will have 6,600. Divide 6,600 by three, and you will have 2,200, and therefore he says the number of boys now voted will supply the waste. Mr. Reddie does not tell us how many boys we ought to enter this year. I do not see that stated by him anywhere.

The number of boys which we ought to enter this year to supply the recognized waste ought to be stated by him, and there, it seems to me, he is in error. I believe the correct method of calculating the supply of boys is this, and I do it, first taking what I consider to be Mr. Reddie's incorrect data as to the waste of 10 instead of 14 per cent. of seamen we ought to provide for. The number of seamen to be maintained, taking his own figures, is 22,000, and the waste to be replaced annually at 10 per cent. is 2,200.

Now, the following is, I think, the simple and correct way of solving the problem. If boys grow into men in three years, and diminish by 10 per cent. in number, in each of those three years, how many boys must be entered in 1867, to produce 2,200 young seamen in 1870? I think that is the fair straightforward way of putting it. A very simple calculation will show that 3,018 boys entered in 1867 will diminish to 2,716 in 1868, to 2,444 in 1869, and to 2,200, the number we wish to get at, in 1870. Therefore, even if we adopt Mr. Reddie's to my mind incorrect and insufficient data as to the waste, we ought to enter 3,018 boys this year, or 739 more than we entered last year. I will now take what I believe to be the correct data, and we shall then find out the number of boys we ought to enter. I substitute 14 per cent. for Mr. Reddie's 10, and get as the result, by the same process, that we ought to enter 4,220 boys this year to meet the waste which I believe to have taken place, and to meet that of course three years hence, for that is the time it takes for boys to grow into men.

The calculation is made as follows: the method is correct, and the data as to waste are accurate; while Mr. Reddie's method, in my opinion, is incorrect, and his data inaccurate.

I estimate the number of *bond fide* seamen which we are aiming at maintaining is 21,000. This was the number voted in April, 1866, when the Secretary of the Admiralty stated in his place in the House of Commons that that number *must be maintained*—a statement confirmed since in the pamphlet referred to by Mr. Reddie, and attributed to the Duke of Somerset. I do not care to strengthen my argument by adopting Mr. Reddie's larger number of 22,000. I have estimated that the annual waste of *bond fide* seamen for which we should provide, is 14 per cent., instead of 10 per cent. Now 14 per cent. of 21,000 is 2,940, or 3,000 in round numbers.

I believe that the annual waste of boys is rather less than the percentage given by Mr. Reddie, more nearly 9 per cent. of the whole number in the service than 10 per cent., but that the boys retain the rating of boy for rather more than three years (including the time they are in the training ships). But the waste of boys per annum, and the time boys retain that rating, are immaterial, provided we estimate approximately what has been and is likely to be the average waste of boys during the whole time they are boys. My table enables this to be done, and 29 per cent. is the result (not very different from Mr. Reddie's estimate of 30 per cent. for three years).

The number which, when reduced by 29 per cent. will be 3,000, is 4,220, and this is the number of boys that ought to be entered this year.

Having arrived at that figure, I will go to a very important point, the accommodation for boys in training ships. The boys remain in the training ships for about 15 months, and therefore you require of course considerably more space to hold the boys that you enter every year. You must have one-fourth more. You must have space for 5,380 boys. It is also found quite impossible to keep the training ships always full, because you are constantly drafting boys away, and of course vacancies remain. I have estimated from my experience that the training ship accommodation ought to be about 10 per cent. more than the number of boys you intend to have in them, so that you may have sometimes more than the right number, to allow for your sometimes having, as you almost always will have, less than the right number. This would oblige you to have training ship accommodation for 5,918, or in round numbers, 6,000 boys. The training ship accommodation is not 3,000, but considerably

short of it, as you may see by running down that list, the "St. Vincent," "Impregnable," "Implacable," "Ganges," "Boscawen," "The Excellent," and "Dasher," giving accommodation for only 2,870 boys, or 230 less than 3,000. The next question is, the complement of boys in sea-going ships. The present complement is about one boy to seven *bond fide* seamen, but if the number of boys entered annually is largely increased as proposed, viz., from 2,279, which was the number admitted in 1865-66, to 4,244, it is evident that the complement of boys in sea-going ships must be largely increased also. If the rate of waste of boys remains without much alteration, viz., 14 per cent. on the boys in the training ships, and 7 per cent. on the boys afloat, then, as about 3,000 young seamen are required to be rated from boys annually, and the boys are not likely to be rated men until they have been two years in sea-going ships, it is evident that the number of such boys will exceed 6,000, and 6,000 bears to 21,000 proportion of 1 to 3.5. But we may consider it as 1 to 4. One boy to four seamen was about the proportion carried in merchant ships, when they were obliged to carry apprentices. There is no reason why men-of-war should not carry that proportion of boys, if it is found to be necessary to do so for recruiting purposes, but the number of men must not be reduced. The "Black Prince," with a complement of 706, has 305 *bond fide* seamen and 46 boys. If my proposal be adopted, her complement of boys would be raised to 76. But if prompt measures are not adopted in this important matter of recruiting, the difficulties will increase rapidly, for we cannot make seamen out of landmen, and we can make only a small percentage out of "novices" who enter at 18 and 19 years of age. In fact, we are dependent upon boys, and boys alone, to recruit our seamen, and it will take three years before these additional boys will be ordinary seamen, and five years before they will be A.B.'s, and during all these three years the present uncompensated waste will be running unchecked. Now the answer to my proposition to increase largely the entry of boys is this, and it is a plausible one, "we shall 'be choked with seamen.' If the seamen give up deserting, give up invaliding, and I suppose you may say, give up dying, then these numbers of boys that I propose to send in, will accumulate, and we shall 'be choked with young seamen that we shall not know what to do with.' Now there is a very simple way of getting rid of that difficulty, and I put it on that paper entitled the "Proposed addition to the continuous service engagement." The object being (fourthly) to facilitate the reduction of the number of men in the continuous service body of *bond fide* seamen, if at any time it is found to be growing too large, owing to the increased number of boys which it is proposed to admit, or to the percentage of waste diminishing in amount; to enable (secondly), the continuous service body of seamen, while it is largely increased in number by the proposed increase in the number of boys, to be at the same time a more select body composed to a much greater extent than at present of A.B.'s. Continuous service men are now discharged for many reasons; stupidity would be added. The new clause, which I propose to be added, is, "Their Lordships reserve to themselves the power to cancel the continuous service engagement of any man who at the age of 21 has not passed for A.B. and trained man." I do not tie myself to the age of 21 or 22, but that is the idea. This clause would act as a safety valve, and in the course of a few years the continuous service body would have been raised to the required number, and if there was any overflow it would be of the less efficient men. The machine would, in fact, become almost self-acting, provided the supply of boys is sufficiently increased and maintained. Those are the views which I have pressed on the attention of their Lordships for some time past. I sum up in these words with regard to the waste and the supply of boys. (1) In estimating the annual waste of *bond fide* seamen, which arises from various causes (see Table III), due allowance should be made for any loss of non-continuous service seamen that may have occurred when ships are paid off, provided that the men so lost had (as has been the case during the last three years) ample opportunity for re-entering if they had chosen to do so. In that lies the question between Mr. Reddie and myself; in that lies the question as to the amount of waste from which we are to estimate the number of boys that ought to be re-entered every year. I say, secondly, that a large increase in the annual supply of boys, probably double the number that were entered last year, or 4,200, instead of 2,200, ought to be entered, in order to maintain the number of *bond fide* seamen afloat at 21,000, the number voted for this

financial year 1866-67. I have now concluded all the observations I wish to make, and I hope that in anything that I have said, I have not given offence to Mr. Reddie. Such was not my intention in the least. I thought it necessary to say what I did say, and I said it with a hope that it would do good, and not certainly with the slightest intention of giving any pain or annoyance to him. Mr. Reddie, as I said before, has kindly come down here to read a paper, and I hope no one who follows me will say anything that will give him any pain or annoyance, or which will make him disinclined to come at any future time and read us a paper on any subject, scientific or otherwise, which he may like to read to us.

Mr. THOMAS GRAY, Assistant Secretary Board of Trade: Sir, I am sure I can do no less than Admiral Ryder did when he began his remarks, and that is to thank Mr. Reddie, and I do it sincerely, for his very able, his very interesting, though somewhat lengthy paper on our Naval Reserve. I can easily understand that this paper has not received the sanction of the Admiralty, any more than the remarks that I am about to make have received the sanction of the Board of Trade. If it were so, Sir, you would behold at the present moment two Departments, as it were, squabbling over one question. Now, Sir, Departments of Her Majesty's service never differ, never squabble. I may mention, as an illustration of Mr. Reddie's present position, a paper I read last year at the Society of Arts. That was a paper that abused legislation that had thrown duties on my own Department, soundly, and I think somewhat strongly, but yet I can say for that paper the same as Mr. Reddie says of this paper, and that is, that no one, not a soul in my office, knew what I was going to say. Although I obtained the sanction of the Chief of my office to read a paper on a subject, nobody ever saw my manuscript or my paper until it was printed to be read at the Society of Arts. And I believe and hope, for the credit of the Admiralty, that the same is the case with the paper Mr. Reddie has read here. Now, Sir, I shall not go into the question of the waste of seamen, or any of those detailed questions. I feel that, interesting as they are, on an occasion like this they are perhaps somewhat dry. I must, however, under correction from the Chairman, make a few remarks on details. I do it under correction, and whenever you are ready to stop me I shall stop. I will now say that the true policy of a country like ours would be, to give to every citizen, whether ashore or afloat, a certain amount of training. But it is not the policy of a country like ours to require that every citizen should either be in the Army or in the Navy for a certain fixed period of his life. The scheme proposed by the Royal Commission of 1859 was perhaps one of the most perfect of its kind, and will illustrate my meaning perhaps as well as anything I can bring you. They proposed that, besides the standing Navy, there should be, reliefs in the home ports, 4,000 men; coast guard, 12,000; marines, 6,000; marines, short service pensioners, 5,000; seamen short service pensioners, 3,000: making a total of 30,000. That there should be a Royal Naval Reserve or 20,000, and coast volunteers, 10,000. Now this scheme, had it been carried into effect, would have placed us on a sound footing, and have been open to no question. As it is, a part of it only, and that a minor part, has been carried into effect. The Royal Commission of 1859 proposed that the permanent Reserve of seamen should be drawn entirely from boys who entered the training ships, and that, for the purpose of creating a Reserve temporarily, we should draw upon the merchant service, and that is the present Royal Naval Reserve. Here is where I take my stand. So long as Government think fit not to establish training ships for the Navy in sufficient numbers to produce our Reserves, so long are we bound to continue our present system, which is one of the best, one of the most economical, and one of the most efficient services that have yet been established in this country. But to keep myself to the point before the meeting, I will say that I have been over Mr. Reddie's paper, and, as carefully as I can, have taken out what seemed to me to be his points. The first is that the "Royal Naval Reserve rigs the market against the Royal Navy." Secondly, the cost is altogether out of proportion, and beyond the value of the force. The third is that the Royal Naval Reserve is insufficient, and is wrong in its construction. The fourth is that it should even be abolished in favour of his scheme, and he hints that the reserve men may be backwards in coming forward. Our Chairman quite endorsed these views, as he said at our last meeting—"It struck me that Mr. Reddie was not going into detail, and going into numbers would be

"going into detail, and leaving the principle, which is the real point, untouched. His real argument rested on the principle of economy. If the present system does bribe men to stay away from the Navy—if it has that effect, the present system is indefensible. It is money thrown away; and if you cannot get men to come even after they are in the Reserve, it is money thrown away again."

The CHAIRMAN: Very well, you will observe that I say, "If it is so"—a very material difference.

Mr. GRAY: I am very glad to find you have not endorsed that opinion. In the remarks I am about to make, I must go into details, for Mr. Reddie's scheme seems to me to be very much like the scheme of an engineer who tells you that he can put a bridge across from Dover to Calais. Now you all agree that that is a good idea, and you ask him for the details. He then says, "No, I am not going into details; it is the grand idea, it is the principle I advocate." You say, "No, I must see your details before I can approve your plan." Then you come to find that he is going to use a material that does not exist, except in his own imagination, and you would say, "I cannot agree to your plan, grand as it is, because your details are wrong." Therefore I must attack Mr. Reddie on his details, and I do intend to attack them strongly, as well as on his general principles. The first question is, does the Royal Naval Reserve, as at present constituted, "rig the market against the Navy?" Mr. Reddie says it does; but at the same time, he appears to me to give himself several flat contradictions. He says in page 3 (280) of his paper, "Admitting that much has been done, and well done, for the fleet; and that the naval strength of the country is in such a condition of efficiency, that if it cannot be described as quite perfect, it may be considered as very nearly so; for I believe it may well bear comparison with what it has ever previously been in any time of peace." He also says in page 15 (291), that notwithstanding this "rigging of the market," as he calls it, 31,207 men actually entered the Royal Navy from the shore, and that 12,000 were pure blue jackets. We all know, down to a recent period, it was almost impossible to man our ships. They waited about in harbour for months, and they could not get men to go to sea; and yet we find that from the time this Naval Reserve is best known, your ships have never to wait for men; you have actually entered 31,207 seamen from the shore. How can he say the Reserve keeps men out of the Navy, and "rigs the market?" The contrary seems to me to be the case. As regards expense, Mr. Reddie says, at page 15 (292), "I beg leave, therefore to remark, that the present Reserve is a very expensive force; and upon reference to the report of the Manning Commission, that recommended it, it will be seen that it was never contemplated, either by the Royal Commissioners, or by those who advocated the establishment of the Reserve, that it would cost quite as much as it really does." He then says, page 16 (293), "As regards the great expense of the Reserve, the retaining fees alone of £6 a-man for 16,000 men, amount to £96,000, or nearly £100,000 per annum, while the expense of management, of drill ships, and drill pay is fully £100,000 more; whereas £200,000 was the total amount estimated by the Royal Commissioners as the annual cost of a reserve of nearly double that number."

The CHAIRMAN: Is that correct?

Mr. GRAY: He says so.

The CHAIRMAN: Did you quote it?

Mr. GRAY: I will answer it in a minute. I want to finish with Mr. Reddie's statements before I attack them. He then goes on to say, on page 18 (295):—"And therefore it is important to consider how much we must pay our reserve during every decade of peace at the present rate. In another ten years it will cost us—that is if its annual charge be not increased—exactly another £2,000,000 sterling." Now, Sir, I ask if this is quite the way to look at this Reserve? It is true that it has cost us, and does cost us—I take it on Mr. Reddie's authority—£200,000 a-year, but the Commission proposed that seamen should only receive £5 a-year, and we give them £6, and that makes a great difference. We have paid in the retainers to seamen in the last year £80,470, and the gunnery expenses which the Commission estimated at £35,000, amount to £120,000. If there is a mistake any way, it is not that you give the seamen too much, but it is in the Department which formed the estimates, leading the Commissioners to give a wrong opinion. At page 19 (296) of

Mr. Reddie's paper, he says, "The cost of the Naval Reserve is annually more than the pay of all the officers, seamen, and boys of the Coast Guard afloat, or of those ashore; the estimate for 1865-66 being only £129,941 for persons afloat, and £179,690 for persons on shore. Once more; the wages of 8,000 marines actually serving afloat last year amounted to less than the cost of this Reserve! It actually costs us about half as much per annum as the whole wages of 16,000 Royal Marines." I ask, is this a candid way of putting the statement? What is the use of making such comparisons? Compare retainers with wages, and establishment with establishment, and you have something trustworthy to handle; but how can you put the whole expense of £200,000 as against the expense of any service! It shows nothing. It shows that one amount is above the other, but it is no comparison at all as to the services rendered or to the material employed. And again, we must bear in mind, of the £200,000 for the Reserve, a very great part consists of wages and salaries of Royal Naval men and Officers, and that therefore the expense of the Navy is reduced and the Reserve increased. And again, we pay £1,500,000 to the militia and volunteers on shore. Why grudge £200,000, if it costs £200,000 for a reserve like our volunteers afloat? I maintain that the expense is not exorbitant. The next thing is, that the Reserve is wrong in its constitution. The principal objection Mr. Reddie has taken to the present Reserve would appear from his paper to be, that they are subsidised at all. At page 20 (297), he says, "And the Naval Reserve men, instead of being subsidised, as now, during peace, might be only paid while under drill, and have this prospect of high wages in the Navy held out to them during war, and when actually serving." He also says, "We might limit the number of the paid men in the Reserve to, say 5,000 or 10,000 (letting the present number gradually drop to that limit), and in future enter another 10,000 or 5,000 only as probationary reserve men, without paying them any 'retainers,' except the pay they would receive while under drill and qualifying to get on the *Paid List*." I should like to know if many seamen in the mercantile marine would enter the Royal Naval Reserve force on those conditions. I entirely agree in every remark Admiral Ryder made, and, as he said so much to the point on that subject, I feel it unnecessary for me to go into that point again. As he has said what I have to say so very much better than I could have said it myself, I will leave what I was going to say, unsaid. Now, it is unreasonable to expect that our skilled seamen should give one-twelfth of their time for nothing, in the hopes of getting, at some time or other, the choice of serving Her Majesty, under her own flag. As regards its inefficiency, this can only be in point of numbers, and not in character, loyalty, ability, or drill. I made a remark the other night, that Mr. Reddie had over-estimated the number of seamen from which we can draw our reserve. I said the number was 85,604, instead of the number 350,000, which Mr. Reddie has got down, and we had a little conversation about that, and the Chairman very properly said, or very properly as he thought, that as there was no difference of opinion, there was no question, only that I had read the returns wrong. Now, Sir, under correction from you, I wish to say that I have not read the returns wrong. The total number of men serving in ships registered in the United Kingdom of Great Britain and Ireland, Jersey, Guernsey, Alderney, and Sark, and the Isle of Man, is 197,643, and no more, every soul on board. It is idle to take 350,000 as the body from which you can draw your reserves. A large proportion of these 350,000 men never come to these shores at all. There are British registered vessels carrying the British flag that have never been near a British port of register, that are manned entirely by Lascars or other foreigners, and never come near the country at all. How then, I ask you, can you include them in the number from which we are to draw our reserves? As an illustration of how you may be misled by misquoting these returns: In this very number of ships 21,626, and the number of seamen, 197,643, serving in ships registered in the United Kingdom, I may state that there are a certain number of them that never come near this country at all; and how is it? Why, during the American civil war, in order to get away from the "Alabama" and the "Florida," the merchants of New York registered numbers of their ships under the British flag. Those ships are registered as British ships, carrying a British flag, commanded by Americans, manned by foreigners, and they appear in

this total of 197,643. I then ask you again, how can you take that number as the number from which we are to draw our reserves? But the number from which we really can draw our reserves is only 72,800 able seamen, and 13,456 petty officers. We want to admit those ordinary seamen of whom we have, in ships registered in the United Kingdom, 19,221; we do not want to do away with the Naval Reserve; we do not want to break faith with the men we have enrolled in it; we merely want to alter the regulations, and institute a second class of men. Enter your ordinary seamen who man our coasters—the men whom you can depend upon—the men who man your smacks, and go out to your wrecks—enter these men, who are as hardy and plucky as the British sailor ought to be; make a regulation whereby you can enroll them in your Reserves, and you will do good. Now Mr. Reddie proposes that the Reserve should be abolished; and this is really a proposition so monstrous, so terrible in its effects, that if any person in this room were to tell me that Mr. Reddie was authorised by the authorities to come down here and read this paper, I would say that that statement alone convinces me that he is not. The Admiralty have taken years to knock down the barrier between the British seamen and the seamen of the Royal Navy. They have done at last a good thing. They have got men to serve in the Royal Navy, who never did serve in it before. They are linking the two services together. These men are bound under a contract, and the contract is—"We do a certain thing on our part, you do a certain thing on yours." Would any one believe that the Admiralty would seek to break the conditions they have entered into with 18,000 of Her Majesty's subjects? I believe the very fact of Mr. Reddie making the proposition will do more to decrease the number of enrolled men in the Reserve than anything that has ever happened before. With regard to Mr. Reddie's plan of a Naval Reserve, I leave that to Officers like Admiral Ryder, who have given their attention to the subject. But it appears to me that if it is worked out, it must take away at least 6,000 of our trained merchant seamen per annum for a period of five years. I ask, is this a statesmanlike proceeding? Is it right that the giant industry of our country should be crippled by having 5,000 a-year of its ablest sons taken away from it for no earthly purpose whatever, when you can do it so much better by having a Reserve as you have at present, and letting our civil population follow their own proper avocations. In making these remarks, I do wish to say, that because I do not propose to have every man in the Navy, therefore those who are in the Navy should rush away from it; I say let your men be all continuous service men. Keep them to the Navy as much as you can, but I do say, maintain the Reserve as well; the one you should have done, and not have left the other undone. Then as to that remark of Mr. Reddie's—and I blush to allude to it—where he suggests to the Reserve men that they may be backward in coming forward, I really feel, Sir, as a Volunteer myself, that he is doing me, and he is doing every other Volunteer, a serious and a grievous injustice, and, I believe, that he is doing himself a greater injustice still. I believe that he is a man of sense, of calm and deliberate judgment, and I am astonished, I must say—I can make use of no other word—I am astonished that Mr. Reddie should, in his study, have put those words on paper. I ask him, are the men who man our lifeboats backward in coming forward? I ask him, are the men who use the rocket apparatus backward in coming forward? I ask him, were the men who went out to meet the Armada backward in coming forward? I ask him, were the men who went and fought at Agincourt backward in coming forward? I ask him, were our Naval Reserve men, who rushed forward to be enrolled in the Reserve at the time of the "Trent" difficulty, and who petitioned the Board of Trade and the Admiralty, that despite other engagements they might be permitted to serve; were they backward in coming forward? No, they were not. I will be bound, if Mr. Reddie will only leave them alone, they will be ready to go to the fight as of old, with the cry of "Heaven for Reddie, England, and St. George." To sum up my remarks, I say, shortly:—First, of all, that according to Mr. Reddie's own paper, the Naval Reserve does not "rig the market" against the Royal Navy. I say that the cost is not altogether out of proportion and beyond the value of the force. I say that the Royal Naval Reserve is not insufficient, and I say it is not wrong in its constitution. I say it should not be abolished in favour of Mr. Reddie's scheme, great as it is, or



any other scheme. And I do say I hope Mr. Reddie will, in this room, withdraw anything that may be an imputation on the Reserve forces of this country, in suggesting that it may be backward in coming forward. I thank you for the patience with which you have listened to my remarks, and for the sympathy with which you have received them.

[Mr. W. STEBLING LACON here proposed to read a memorial from 170 seamen of the North-eastern ports of the kingdom, but it was not read, as not bearing directly on the question before the meeting.]

Mr. JAMES JACKSON: Sir, I am a member of the Royal Naval Reserve Club, and have taken considerable interest in this question from the commencement, and with your permission—as Mr. Reddie's paper has created some excitement in the country, the Royal Naval Reserve feel that an insult has been cast upon them—I will take the liberty of reading letters from men representing the largest out-ports in the kingdom, touching upon this question, and not upon any particular question of grievance.

The CHAIRMAN: I do not think that this bears upon the subject, because you see you are begging the whole question. It is not that Mr. Reddie said so, but merely that Mr. Reddie's language has been perhaps somewhat loose, and an interpretation has been given to it which he did not mean it to have. The question is as to the Reserve, and not as to Mr. Reddie's language.

Mr. REDDIE: If I might be allowed to express any opinion, I should rather hear Mr. Jackson read what has been stated.

Mr. JACKSON: I can only say that the Officers and men connected with the Royal Naval Reserve feel that they have been unfairly treated in Mr. Reddie's paper, and, speaking as a landsman, and connected with the commerce of England, I think that if a Volunteer service on shore is valuable, a Royal Naval Reserve must be still more valuable. What ought to be the duty of the Government of this country but to protect its shores? Let an enemy once land; let them sack one large town, and you would have paid for the Royal Naval Reserve for ever if you could have prevented it. Now when the question of a Reserve was first discussed, I know that seamen had a great reluctance to enter the Royal Naval Reserve. It was felt that they were to be kidnapped into the Royal Navy.

The CHAIRMAN: Really that is going away from the subject altogether.

Mr. JACKSON: Then I will confine my remarks to this paper, and I have no hesitation in saying that the general feeling throughout the kingdom is one of confidence in the Royal Naval Reserve, and that the men who have entered that service have entered it with a full desire and determination, if war should arise, to the best of their ability to defend the honour of this country. I think that the Officers, too, connected with the Royal Naval Reserve prove that they have the desire to enter the service, if necessary, and to fight for their country. Their first offer of service to the Crown was made when there was a probability of a war with America, and at two great meetings that were held at that time. Lord Clarence Paget and others were particularly anxious, and evinced a great desire to increase the Royal Naval Reserve force, and such a paper as has been read by Mr. Reddie, is calculated to lessen the Force, to disgust the Officers, and to drive them, not only from enrolling, but to drive a large number of them from the Service. We saw a slight notice of the paper in the *Shipping Gazette*, and I happened at the time to meet several distinguished Officers connected with the merchant service, who said "I shall throw up my commission. When I tendered the offer of my services to the Crown, I did it as a man of honour and a gentleman, with a full determination if this country should ever require my services, to fight for it to the best of my ability." And with regard to the value of the Officers of the merchant service, I know it has been stated they are not very good seamen, but they just know the propulsion of vessels by steam.

The CHAIRMAN: That is not in the paper at all. It is a pity to be going away from the question. If mere hearsay and gossip outside is to be produced, there will be no end to the discussion.

Mr. JACKSON: I will just beg to make this one observation: that from such remarks as these made by Officers connected with the Royal Naval Reserve, it

shows that an impression had gone abroad, and I think we are very much indebted to Admiral Ryder for bringing out so clearly before us in the first instance, that Mr. Reddie's opinions are not endorsed by the Admiralty. I will not take up your time any longer. I should like to have been allowed to read three or four letters, because they materially bear upon the subject. On behalf of the Service, and on behalf of the men, I may say, there was a general feeling of security when it was known we should enrol a large number of men in the Royal Naval Reserve, and that that Reserve would be officered by distinguished men in the merchant service, and I think, as a nation, we ought to be grateful to them, and that nothing should be said that in the slightest degree could hurt their feelings or question their loyalty. ("Read, read.") The first letter is from one of the largest shipowners in the north of England, the ex-Mayor of Sunderland. He says, "Dear Sir,—Knowing the interest which you take in all mercantile marine matters, I cannot refrain from calling your attention to the statements in reference to the Naval Reserve force in our country propounded by Mr. Reddie, of the Admiralty, before the members of the Royal United Service Institution. This gentleman has had the boldness to assert that the Naval Reserve force is an inefficient one, and one tending to keep men out of the Royal Navy. Now, Sir, from my knowledge of the Reserve forces in this neighbourhood, I can contradict positively Mr. Reddie's statement. We have here and in the neighbouring ports about 3,000 of the best of British seamen—I say the best, because the north country seamen are engaged in healthier and harder trades than those who trade to our Southern climes. Well, Sir, remove the force; let the 3,000 men of the Reserve be disbanded, how many would you find entering the Naval service? I should say scarcely 5 per cent. of the whole. They dislike the service. "Why? Because in one service they have smaller pay, and are deprived of the freedom which they possess in the merchant service. But, Sir, like the Volunteer forces of the land service, the men of the Naval Reserve have joined these ranks purely from patriotic motives, and with a view to serve in the defence of their country in the case of need, at a yearly cost scarcely equal to that which the Admiralty spend in altering any single man-of-war; but the existence of that force as now constituted, places at the disposal of the country a powerful naval force for any sudden emergency. Take the advice of Mr. Reddie, and disband this force; how would you man the Navy? Not by volunteer seamen. They would not leave the merchant service for the naval, so long as they find profitable employment in the former. Therefore the shipowners of this country would be indirectly sufferers in the case of war."

Captain HEATH, R.N., C.B.: The Chairman rightly said that the question before us is, first, whether the Naval Reserve as it now stands should be abolished; and secondly, whether the one proposed to be substituted for it is a good one. The gentleman who spoke last has given two good reasons for retaining the present Reserve, and I will give you one which strikes me as strongly against the adoption of the source proposed, that is, that it will never yield the numbers you hope to get. Mr. Reddie's first source from which he would draw his supply of the continuous service men having served their ten years.

The CHAIRMAN: It does not limit them to ten years.

Captain HEATH: Supposing our whole fleet were continuous service men; supposing the whole 20,000 to be continuous service men, that would give you every year 2,000 men leaving that service. Would those 2,000 men join the Reserve? Would any large number of them join your Reserve? Would any more join than join at this present moment? I do not know what that number may be, but, I take it, it is 100 or 200. Admiral Ryder can tell us.

Admiral RYDER: There are not ten per cent. of the present Naval Reserve who have been in the Navy.

Captain HEATH: Then 100 or 200 men would be the total number you would get from that source. Mr. Reddie would then turn to the merchant men who had joined the Navy for a minimum period of one commission, about three or four years, who might perhaps remain a second commission; that is to say, men who being merchant seamen originally, joined our service for a few years for the sake of getting enrolled. Captain Selwyn, on a former occasion, propounded a somewhat similar

proposition. I think that both those propositions are founded on an entire mistake of the nature of the seamen. The genus seaman, species man-of-war's man is entirely distinct from the species merchant sailor. The one is generally brought up from a boy in habits of order, cleanliness, tidiness, with good food and good treatment, or, at all events, regular treatment, and against that, he has his long journeys, and three or four years' absence from England, but that is his life; he has accepted it, and he likes it. The merchant sailor is far from young; he trusts to chance, whether his captain is humane, for good treatment; whether his owners are liberal men, for good food and various things of that sort. He is allowed to dress as he likes, to shave and wash when he pleases. He lives sometimes in very uncomfortable berths, but he has his quick returns to England. He returns to his wife and family very often, at intervals of months, never at longer periods than one year. Now these two classes of men will never, at your beck and call, either serve in one shape or the other. There is one point in which the condition of the seamen of the Royal Navy might be improved, and Mr. Reddie might himself improve it, and that is, in their money affairs. They are now managed at Somerset House. A man comes home from abroad, having served on a foreign station. He is invalided. He comes to England. His pay tickets go to the Admiralty, but the paymaster is not allowed the credit of having calculated it properly, and they must be audited at Somerset House. He is kept on board the flag-ship sometimes as much as ten days, waiting for those papers, not allowed to go home. He goes on shore, borrows money, and pays an exorbitant interest for it. He spends it, and goes home with nothing. That is one small grievance, which I hope Mr. Reddie will take notice of.

Vice-Admiral J. H. CODRINGTON, C.B.: I am not going at this late hour of the night through all these tables; they would require much more consideration than I could give it in the short time I have at my disposal. I think, with respect to them, that we must give our thanks both to Mr. Reddie and to the gentlemen who have addressed this meeting on both sides of the question, for the pains and labour they have taken about it, and the way in which they have opened it up. I now want to draw your attention to another matter. There is a paper which has been put up on the wall, containing certain resolutions, and worded "We resolve" so and so, "We are of opinion" so and so. Now if that is put forward as that this meeting is to give its opinion in one way or the other on this question, we are certainly stepping out of our province. If I apprehend rightly as a Member of this Institution, we meet here in the evening with the other Members of the Institution, and the friends whom we may invite, to hear and discuss such papers and such illustrations as any gentleman may be good enough to take the trouble to come and read and show to us here. Whether he be right or wrong, the agitation of the subject gives us a great deal of information. It may possibly improve him, for aught we know, but it certainly improves us. We also gain much from the criticisms, as we see below there. But, Sir, I would not as a member here give my vote for this proposition or for that. It would be out of my province entirely. We should not pledge the meeting. We are here as individuals, members or friends; private persons almost, but we should be *quasi* pledging this Institution to certain resolutions on the one side or the other. We have no authority to do that in any way whatsoever. I think we meet here to listen to information, but not to pledge this Institution to any course. I may almost say more. I am rather sorry to hear the name either of the Admiralty or of any other Public Department brought forward in this theatre. I can recognize only the members in this Institution and such gentlemen as are good enough to come here and speak their opinions as individuals. I know nothing of the Admiralty here. The Admiralty or the Horse Guards are all the same to me; we are here as individuals. Whoever stands up to give us information, stands up as an individual, without pledging his Department, and I do not think he should say anything to commit any one Department. We are much more independent and in a higher position as members of the Royal United Service Institution than we could possibly be as partizans of one Department or the other. If any resolution were to be proposed here, I, as a member of this Institution, should walk out, for I would not be a party to it.

Commander W. DAWSON, R.N.: I have already spoken, but I spoke under pro-

test; as not having the paper in my hand I could not enter into the details more particularly. It appears to me that there are several other gentlemen present who would wish to join in the discussion. There are several Officers of the Royal Naval Reserve here, and a number of other gentlemen who would like to speak also, and the remarks I was going to make could not possibly be compressed into five minutes. I rise therefore for the purpose of proposing the adjournment of the discussion to another night.

Mr. REDDIE: I trust, before you come to a decision upon that proposition of Captain Dawson's, that you will allow me this evening to say a few words to remove some of those misapprehensions, and get rid of some of those issues which have been—unfortunately, I think—imported into this discussion, and in a very unusual manner. I would not have come to this Institution to have read a paper if I had thought I would be subjected to a personal attack, or told that I was coming here as the mouth-piece of the Board of Admiralty. I have denied that already, and will not condescend further to allude to it. With reference to my own paper, and the propositions I have made (or rather the suggestions I have thrown out, and the arguments I have used), I have by no means proposed the abolition of the Royal Naval Reserve, and the substitution of any other force. My paper will speak for itself. I have brought out certain issues as regards the present Reserve; I have brought forward certain views which, instead of being the views of the Admiralty, have been shown to be contrary to the views of the Admiralty; because in my paper, if you draw any deduction at all from it of a very positive kind, you will see that I argue we have now a sufficient number of boys to keep up our standing force. Admiral Ryder has asked me about the number of boys to be voted this year, and I find there are actually 400 more boys. I did not speak with reference to the Naval Estimates, but as an independent man, forming my own judgment upon certain statistics which I have laid before you. But those views which I have advocated as regards the Royal Naval Reserve (which I think might be made a much better Reserve if it were composed of seamen who had had four or five years' service in the Navy, similar to the *Inscription Maritime* of France, which is a reserve formed of men so trained), you will find are the very same views, as regards the character of the Reserve, put forward in a very able book, which, I believe it is no secret now, was written by Admiral Denman—not a layman, not a landsman, but a man just as worthy of respect as any Naval Officer who has spoken on this subject on any occasion; and he tells you that the 28 days' drill will not make much of a trained man for you, unless he happen to go on board ship immediately afterwards. You will find at page 102, of "Admiralty Administration," this opinion:—"Looking to the amount of skill in gunnery now required to make an efficient man-of-war's man, it is evident that 28 days' drill in the year will place them not materially in advance of untrained men, unless they happen to be called on for service just after the expiration of the 28 days' training." Now if I happen to hold the same opinion, what about it? I am rather surprised to hear Naval Officers think a man-of-war's man is not better than a merchant seaman, trained for a few days in the year.

Admiral RYDER: Who said so?

Mr. REDDIE: It is implied; you seem to think that they will be a perfect Reserve. Well, here is a difference of opinion. I have merely put forward my views. I think they are worthy of consideration; and they are now in print, and it is really of very little consequence whether certain Naval Officers have formed a high or a low opinion of the Naval Reserve. A great part of Admiral Ryder's remarks consisted of "we believe!" His posting up these mere opinions of his own, and with meagre extracts from my paper reminded me something of Mr. Bright posting extracts from Mr. Lowe's reform speech in the workmen's shops, intending to throw a kind of odium upon him! And all because I used an expression about the Reserve men, which certainly did not apply to the officers, as Mr. Jackson seemed to think, for I have never mentioned the Royal Naval Reserve officers in my paper once; and we know perfectly well there are none of them paid, and so it could not apply to them. Now, I merely pointed out that the men, according to the present rule, unless you pay them the retainers during war, would be actually receiving less pay when they

are fighting for you, than they are now getting in time of peace; and I said that if you found men under those circumstances backward in coming forward—and recollect they have to consider their families—it was not to be wondered at. Moreover, consider that ten years hence you will not be dealing with the men you have got now. I hope when papers are read here, or in any other Institution in this country, people will speak out; and I beg to say that there are an immense number of opinions that I do not entertain myself that have been attributed to me, but are not to be found in my paper. But, even, if the discussion is to be deferred, it will be out of the question to go into these figures of Admiral Ryder's. But there is one remark that is pertinent to the subject—and I think this is really the only remark I care to reply to—and that was brought forward by Captain Heath. He tells you if you have a Reserve of the kind I propose, you could not get the men. Now I point you to this table (Table II, Appendix A), and it will show you where you are to get the men. In the five years from 1861-62 to 1865-66, 29,182 seamen of all sorts were discharged from the Royal Navy, and of these, 19,000 were pure blue jackets.

Captain HEATH: They did not go and live in those forecables, and eat the food that we hear of in the merchant service. They went somewhere else.

Mr. REDDIE: There were 19,000 pure blue jackets who went out of the service in those years; and my proposition is, that just as you might at the close of the Russian war, have paid some of those 13,000 who then left you in two years, a certain sum of money, when you could not employ them in your ships, and enrolled them (and they would have considered it a compliment to enrol themselves) as a Reserve force while they went to take a turn in the merchant service; I say so, you might have enrolled great numbers of these also. No one of the gentlemen who have spoken has paid any attention to the modifications which were plainly enough stated in my paper, as to those inducements I hold out, both for the merchant seamen to go into the men-of-war, and for the men-of-war's men to go into the Reserve; but as they are all recorded they will speak for themselves. I really do not care much to go into mere matters of opinion, when what is already stated is printed, and will stand side by side with what others have alleged.

I come now to Mr. Gray's correction of the numbers of merchant seamen. Well, granting that out of 350,000 men, who are given in Mr. Gray's own returns as the crews of merchant vessels—granting that you must eliminate a very great number of them—certainly a very great many according to Mr. Gray, because you must not only take off about 91,000 that belong to the British possessions abroad, but he says you must reduce the 255,000 that still remain, to 72,000. Well, Sir, I will accept that—that you have only 72,000 able seamen in the mercantile marine—but is that the slightest argument against a system which will increase those numbers? What I have argued is, that if you will turn our men into the merchant service, and take men from it less qualified, we will qualify them for you and send them back to you after we have trained them. Well, then, what answer is it to tell me you have badly qualified men in the mercantile marine? I claim that as my argument, because I will give you more qualified men; and you will find in this same book, "Admiralty Administration—its Faults and Defaults;" and I suppose people will not say it was written in the interest of the Admiralty—this opinion expressed:—"Instead of our men being forced to engage for so long a period as ten years, or to lose nearly five pounds a-year by taking a non-continuous rate of pay, they might be entered for five or even three years, by which means twice or three times as many men might be trained in the Navy, as under the ten years' entry, which necessarily reduces the number of trained men in existence to a minimum, and practically bars any interchange between the two services"—the thing which Mr. Gray seems to rejoice in; for he says—"Let the Navy sailors stick to the Navy, and let the Naval Reserve stick to the mercantile marine—"

Mr. GRAY: I beg pardon; I never said anything of the kind.

The CHAIRMAN: No, but it comes to that.

Mr. REDDIE: I think that is a much fairer interpretation of what he said, than what he gave as an interpretation of what I said. The book goes on—"practically bars any interchange between the two services, so essential to efficient reserves;

"for no man can be thoroughly trained except by actual service on board a man-of-war, and it would be most desirable to include as large a number as possible of men thus effectively trained in a first line of Reserve, if Reserve it may be called, one which ought to be in fact an advanced guard (p. 117)." I think the merits of the question are pretty well met in what has been advanced already; but I must make one remark with reference to what Admiral Ryder began by saying about the propositions that he made to the Admiralty,—and recollect he ought to have stated, it was not merely to the present Board of Admiralty, but to the last Board of Admiralty. Now I do not know whether the two Boards were actually of the same opinion upon this subject—it will be perhaps very remarkable if they were—or whether I equally represent them both, if they both differ in opinion! But there is one thing that Admiral Ryder omitted to tell you. He told you he had recommended an enormous increase of boys; and he knows what answer he got, not from civilians at Somerset House, but from Naval Lords and Admirals at Whitehall, upon that subject. I did not want to go into these matters, but they have been brought forward in such a prominent way that I feel a great temptation to read from this paper, written by one of those Admirals, but I refrain. There was one thing, however, the gallant Admiral forgot to tell you. Mr. Gray has charged me with a certain statement. You will find it put, if I did say it, very mildly in my paper, and certainly as if I had drawn it from some other source. The Admiral has sat and heard me accused of saying that the Reserve has stopped the entry of seamen into the Navy. Now I should like to know how that idea got into my head. I was surprised that Admiral Ryder did not stand up and say that it was he who has alleged that—has alleged it over and over again. He has put it in print, although he has not sent me a copy of the memorandum which he wrote and printed, on the subject, and although he promised to do so. If he had sent it I should have read it to you. You will observe, however, that what he states, as to the want of the proper number of boys, relates to the year 1865, and consequently that did not relate anyhow to the present Board of Admiralty. He has given you an almost frightful account of the way in which the boys vanish from the service. Well, while he was going through those statistics, with which I am pretty well acquainted, I added up the numbers of boys in a return that I have given to him,—for there is nothing which I have not placed at Admiral Ryder's disposal throughout, although he has not returned me the compliment,—I have added up the numbers of boys borne in Her Majesty's ships from 1858-59 down to 1865-66, and they amount to 63,096. Now if you divide those numbers borne—this is a very simple way, a much easier way than in that interesting diagram with lines running about in a way that I profess I do not understand—you get here a total of 63,096 boys borne in that time. If you divide that by four it will give 15,750. Well, you actually get more than one-fourth of your boys borne, rated into men and stopping with you—not dying and invaliding, for I do not understand the process by which either dying or invaliding is to be accomplished which the Admiral put forward—you have actually got in that same period, out of these numbers borne, 16,985 boys rated as men: so that if you simply take the numbers of boys borne in the table that I have laid before you, you may calculate that at the end of a given period,—(not in the three years of the Admiral's experience at the Admiralty—while we were reducing the forces, when you will find in the Navy Estimates smaller numbers voted, and hence this drain that he speaks about)—you will find, if you divide that number of boys by four, you will get nearly the numbers of men rated. That very simple calculation will put all these statistics on one side, though I understand from the Admiral that he is going to print them with his speech. I am very glad that he is, because I put that very plain statement as against them, and you will see which will last the longest; for these figures are actual facts.

Admiral RYDER: Mine came from Somerset House.

Mr. REDDIE: Not the manipulation of them.

Admiral RYDER: I beg your pardon. All checked in their present state, and said to be absolutely true. I can show it you in writing.

Mr. REDDIE: We have never differed about some of the numbers, because we have given you them. It is only a question of how you use them. There is one



point I must notice with reference to this proposal of training many boys in training ships. The Admiral said the waste there was 14 per cent., and only 7 per cent. in sea-going ships—that alone must be a consideration. Of course I have not put any proposition forward of a definite kind. I have put forward things which I regard as of grave import for consideration, and I am sure they will be considered. The Navy Estimates amount to a very large sum of money, and we should remember what the waste of boys will be, if you train to the large extent of 20,000, as some have advocated. We know what the author of that pamphlet on *Naval Expenditure* has said, and I have got it already in my own paper, therefore I shall say no more about it. I am sorry such an issue as that, for instance, has not been discussed at all to-night. We have gone into what relates simply to the administration and the management of the Navy at the Admiralty, and not even that, in a profitable way; for this is what relates to 1865, and really I do not think you want to know to-night whether the Lords of the Admiralty of that period did their duty or not. Should the discussion be adjourned, I am prepared to stand by my paper. I withdraw nothing.

The CHAIRMAN: The question has been proposed that there should be an adjournment. One of the reasons assigned is, that some of the Officers of the Reserve may wish to speak; but really I do not see why they should be called upon to speak to this question. The question raised by Mr. Reddie is not one for them at all. We have had all manner of suggestions, which do not seem at all to the point—that letter of the Mayor of Sunderland, for instance.

Mr. JACKSON: That is a matter of opinion.

Rear-Admiral Sir FREDERICK NICOLSON, Bart., C.B.: I beg leave to say that as the Officers of the Royal Naval Reserve are entitled to be members of this Institution if they are inclined so to do, should there be any present, and they would devote a few minutes to this question, I am quite sure that the Chairman and all the members here would be only too happy to hear what they have to say; but as it is nearly eleven o'clock, I am afraid we have but very little time this evening to finish this discussion, though for my part I should be sorry to see it adjourned, for these continued adjournments prolong the subject much, and it is almost impossible to carry in one's head, all the previous arguments adduced. I think it would be a great pity, if there are any gentlemen present who would wish to occupy a few minutes, that they should go away with the slightest impression that any member of this Institution is not most anxious to hear them.

Captain HUNTER: There is one portion of Mr. Reddie's paper that I should like to make a remark upon. I think he said there was a smaller number of men in the merchant service available for the Reserve, and that all the ablest men were in the Navy. I think that was his statement.

The CHAIRMAN: It was not Mr. Reddie's statement. It was I who compared the numbers.

Captain HUNTER: He gave that as a reason why we should do without the Naval Reserve.

The CHAIRMAN: I said it was suggested.

Captain HUNTER: Well, now I should like to ask how the Navy was manned at the time of the Russian war? how the Baltic fleet was manned? Is it not notorious that men were picked up in the streets of London and other large towns? Is it not certain that those men were sea-sick, and not able to sweep the decks for the first week? And would not it be a great advantage if you had 8,000 or 10,000 Naval Reserve men, with 28 days' training, ready to be put on board ship at any time? Is it quite certain that if the Russian fleet had come out from its harbours, our fleet would have been found quite so formidable as people thought?

The CHAIRMAN: Quite!

Captain HUNTER: I think it is doubtful.

The CHAIRMAN: Not the least doubtful!

Captain HUNTER: I think, instead of doing away with the Naval Reserve, that if you would relax your rules and extend its limits a little, and take in fishermen and the men along the coast, it would be better. If all these men were enrolled in your Naval Reserve, it would become a very formidable force, and we should be very

much better prepared for fighting. I say, you cannot do without the Naval Reserve.

The CHAIRMAN: At this late hour I ought not to occupy your time. It is very true Mr. Gray reduced the numbers very much, but you will observe whatever reduction was made of the numbers from the 350,000, the same must run through the whole; and therefore if you say that in 1813 we had 147,000 men in the Navy, and 165,000 in the mercantile marine, you must reduce them down in the same way, and you only get 72,000 available.

Mr. GRAY: I never said anything of the kind. Your statement was that as we could do without a Naval Reserve in 1814, we could do without one now.

The CHAIRMAN: Certainly, it was suggested by the totals.

Mr. GRAY: My point was this: Mr. Reddie said there were 300,000 men, and we only get 16,000 in the Naval Reserve. My point was to show that there were not 300,000, but 72,800 able seamen and 13,456 petty officers, and out of these we got the 16,000.

Mr. REDDIE: It is no part of my argument. I did not put the argument at all in the way you put it. I never made any such remark in my paper, nor in what I said to-night. That is one of the things you put upon me.

Mr. GRAY: I tried to condense it for you.

The CHAIRMAN: I think it is a great misfortune that the question has really not been discussed. We have gone off the issues, and have scarcely said anything about the Reserve at all, therefore it is impossible to give any opinion about it. That question has not been discussed; but I do say that there is a point arising out of it that is deserving of inquiry, and that is this. The Reserve have had a distinct assurance that they will not be called out except in the case of a great war. Now if a great war does not occur for twenty years, and if the waste takes place as is represented by those figures—21,000 men enrolled, and 5,000 wasted in the short period during which they have been enrolled—I want to know where will be these 16,000 men, with that continuous waste going on, in ten years, much less in twenty? You will have paid a number of men, and this number of men will have wasted; they will have died off, have been invalidated, and not have come forward. So that literally you will have paid them money for nothing at all, and there is great want of economy.

A VISITOR: If there is no war you will have got your men cheap.

The CHAIRMAN: For what? Paying them for doing nothing?

A VISITOR: By their being always ready.

The CHAIRMAN: I say no, because what you really want them for, is a contingent force. It is just the very difficulty; there is no provision made for that which is the most important of all, and that is a warlike demonstration. Actually, the very thing which keeps off war, you have not the means of doing. You dare not call them out. You want to make a warlike demonstration; and we know very well that if a warlike demonstration had been made at the commencement of the Russian war, you would have had no war at all. It was because the Russians did not believe that you would go to war, that they went to war. Now I say one of the greatest defects is just this, that there is not a contingent force that you can call out. No doubt you have the marines. Mr. Gray said he did not see that there should be any comparison between the marines and these men. Now I say there is, very distinctly. If you can put 8,000 marines on board, and can get landmen to fill up, and they are useful, more particularly now, as you have better means of training them than you had during the war; by the arrangements of your gun numbers and auxiliaries, you have means of using landmen to a greater extent than formerly. Therefore I say it is a very great defect in the existing system. And it ought not to be judged from any personal feeling, for if men are really patriotic, they will look at it in a patriotic point of view, and not from a personal point of view. I have no hesitation in saying this has been no personal question, and it is quite out of place to take expressions of that sort and twist them into personal questions. It is a great defect, that what you really want the men most for, is for this contingent supply which actually prevents war; you are not allowed to do that, and you are indefinitely paying men really for nothing.

A VISITOR: But if the recommendation of the Commission had been carried out, you would have been able to make your great demonstration without having to call out your reserve at all.

The CHAIRMAN: That is a defect existing now. I am dealing with what is, not with what might have been.

A VISITOR: They ought not to be disturbed, your second reserve; you are disturbing your second reserve. Keep those men for your second reserve.

The CHAIRMAN: I am not dealing with anything that does not exist. If there is an alteration, then that is an admission of the defectiveness of the present system. I say this discussion has gone off upon irrelevant issues, and that we really have not got the main question discussed at all.

Commander DAWSON: We should like to hear Mr. Reddie's side argued, and I expected to-night we should have had Admiral Erskine present and others. I wish to hear their side of the case.

The motion for the adjournment having been seconded, the meeting was adjourned to Tuesday, March 5th, at half-past eight.

#### ADJOURNED DISCUSSION.

Tuesday Evening, March 5th, 1867.

CAPTAIN E. GARDINER FISHBOURNE, R.N., C.B., in the Chair.

The CHAIRMAN: We will resume the discussion on Mr. Reddie's paper. We all recollect, I dare say, that the first Emperor of the French said, that the position and influence of a nation depended upon the number of men it could immediately bring into the field. I think we shall all be inclined to endorse that opinion. And the real object of this paper is to make provision whereby a large number of men can be called upon and made available in a short time. That, the real, the proper point of the paper, having been left untouched in the discussion, I think the meeting will agree with me, that if any gentleman has any objection to that point,—I mean, if he thinks the plan proposed by Mr. Reddie is not practicable, or if he can suggest a better plan for the purpose, we shall be glad to hear him. I repeat that that is really the main object of the paper; and I must say that I think that any gentleman who takes the same view of the matter will be the best person, first to address the meeting.

Mr. FREDERICK WOOD, of the Mercantile Marine Office: I am fully aware that it may appear very presumptuous in me to rise first to address this distinguished assembly. However, good Generals put their worst troops forward first. As an additional excuse, I may mention that we do not meet here as Officers, nor as officials of high or humble grade, but as Englishmen equally interested in the welfare of their country, and the maintenance of the maritime supremacy of Great Britain. I feel painfully oppressed with the difficulty of the task of saying anything that shall be interesting to this meeting, after the very lengthy and able—I beg your pardon, I should reverse the order—after the very able and lengthy speeches that we have had the pleasure of hearing on the two previous occasions. I shall confine my remarks entirely to that portion of the paper that treats of the Royal Naval Reserve; and I hope that the truth will be elicited at this meeting, whether it is, what its name imports it to be, or whether it is an expensive and useless sham, not only without any practical utility, but actually detrimental to the service it was called into existence to supplement. It is not my intention to speak of the Officers of the Naval Reserve; merely of the seamen. I see no mention of the Officers of the

Naval Reserve in the paper, and I suppose they have been omitted for some very good reasons. There are very good reasons certainly, each one of which is really sufficient; and I have no doubt there are reasons which influenced Mr. Reddie in omitting the mention of the Officers from his paper. In the first place, being gentlemen of honour, it is to be supposed—

The CHAIRMAN: The real point is to discuss the paper. It would be desirable that you should confine your remarks to the paper.

Mr. WOOD: I will endeavour to do so. I am coming to the point whether or not they would have any option.

The CHAIRMAN: You are not discussing Mr. Reddie's paper.

Mr. WOOD: I am saying that it would not matter much to the nation whether they did or did not, because the Navy List has sufficient Officers to command the fleets of the entire globe. That may be the reason why they are passed over, and why the paper refers to the able seamen principally. The Naval Reserve is considered by Mr. Reddie as a very expensive institution. On the contrary, I think it a very economical one. The total expense is stated by him to be £200,000 per annum. No one can be better informed than he, or have better opportunities of getting at the statistics; therefore I must assume that that sum, as stated, is correct. We have 16,500 men in the Reserve. We will say 16,000, because the 500 will allow a margin for losses and deaths not yet reported. Now, 16,000 men at £200,000 will give us £12 10s. per man each year.

The CHAIRMAN: I must really call you to order. I think it is unfair, taking each individual separately. The question of expense is comparative.

Mr. GRAY: I think Mr. Wood is in order. We are enabled to judge the cost better in this manner than by dealing with large amounts.

Mr. WOOD: I say that that cannot be regarded as an extravagant sum to pay for 16,000 well-drilled first-class British seamen, always in readiness for the defence of this empire. I am aware it may be objected that these men are not always in readiness, as they are often away on foreign voyages. They may not be always available for the defence of the realm of England; but they are available for the defence of the empire, because they are liable to be called out to serve in any part of the world, wherever they may be, to take their place on board a man-of-war at once. The paper also contains a complaint, that a great many men "slip through our fingers;" that is to say leave the Naval Reserve after one, two, or three years' drill. The money spent upon these men, our author considers entirely thrown away. On the contrary, I think it is well laid out. The force is reduced every year by men leaving it for drunkenness, or misconduct. It enables us to be assured of the steadiness and reliable qualities of the remainder, as none but well-conducted men can possibly remain in the force. In the event of a great war, there is no doubt that all the resources of this country would be severely taxed, and that a bounty would be offered for volunteers. Then, we should find, that we had "thrown our bread upon the waters," and should "find it again after many days" for there would be a great difference between men who have mastered the rudiments of their drill, and possibly be able to take their places at a gun, and men who have had no drill at all; and the men, who would have left the Reserve through irregularity, would be the very men who, in case of war, would come forward and greedily accept the bounty that was offered. I ought to admit that a great number of the men who have left the Reserve, and I am sorry to have to admit it, are very good men, indeed, who have served their five years, and then left the Force. That is a loss very much to be deplored. The reason is that the terms so far from being advantageous, as stated by Mr. Reddie, are not sufficiently advantageous to induce first-class seamen to remain in the Reserve. The £6-retainer should not be augmented; but 21s. a-week is by no means a high price for a skilled artisan. Now, if a man is reported by the Commanding Officer of the drill ship to be a well-drilled man, he might receive some little advance in his weekly wage; and a class of petty officers might be called into existence who might receive 30s. a-week while on drill. It would be great presumption on my part to make these suggestions; but I happen to know something of both the wishes and the ideas of the men themselves. Not having the presence of their superiors, they are more communicative when I come in

contact with them. The Naval Reserve as it is at present constituted, has had the advantage of being well considered by a man of very great experience,—the late Captain J. H. Brown, R.N., Registrar-General of Seamen, who was one of the originators of the Reserve. I do not wish to trouble you at any length, but I have a few remarks of his which I should like to read.

The CHAIRMAN: I do not think your proposition to the point, because, after all, the opinion would be that of a man interested in his own child.

Mr. WOOD: I beg your pardon. At the time he penned those remarks he had retired from active service, and had nothing to hope from others. It was very shortly before his death, and some time after his retirement. He said, "However perfectly a standing peace navy may be regulated, it must be increased and sustained in war from the only available source, the mercantile marine, and as the men drawn from that source will stand side by side with their brother seamen of the fleet, and share with them the perils of war, it is most desirable that they should be competent for that purpose. The recent formation of a Naval Reserve has relieved the anxiety and apprehension so long experienced as to the means of promptly manning the fleet, and the best seamen in the nation well-drilled are now available for increasing the *personnel* of the Navy to a considerable extent. To foster and encourage it is to consolidate the mariners of the kingdom of every degree into one fraternity—to establish the means of utilizing our vast resources, and to demonstrate its overwhelming superiority. This is the best policy for averting war, or, should such a calamity occur, for ensuring a speedy and successful termination. The *personnel* of an extensive Navy is now secured, and means adopted to improve it without detriment to the usual occupation of sailors, or the interruption of trade and navigation." Now, that last remark I consider very much to the purpose, as it is above suspicion, dictated by no other motive than the welfare of that country which he had served so long and so faithfully, both on shore and afloat. I shall not go into any details connected with this scheme probably, because I am not competent, as I have been suffering from statistics on the brain since our last meeting. I would entreat gentlemen present, to look upon this question with more statesmanlike, broader, and more comprehensive views. Is it desirable that the Royal Navy should exist as an isolated institution, having its Reserves and its contingents attached to itself, and not resting upon the broad basis of the mercantile marine? This, I say, is a fatal error. All history proves that a State Navy, whether it be Imperial, Royal, or Republican, can only co-exist with, and be dependent upon, a prosperous mercantile marine. We find the Phœnicians and Carthaginians were powerful at sea simply because they were maritime traders. We find Athens boasting of naval victories, because her spirit of mercantile enterprise was equal to our own. To come to the mediæval ages, we find that the Imperial power, and the Ottoman, vast as it was, could not create a fleet simply by Royal authority, to match the navies of the two trading cities of Venice and Genoa. And to come to still more recent times, we find that of our three great rivals for the empire of the sea, Spain, Holland, and France—

The CHAIRMAN: You must be good enough to keep to the point. This is history. This is not in the paper. You really have not been referring to the paper. For instance, with respect to the estimate, it is a comparative estimate, it is not an absolute statement, with respect to cost. You have been arguing as if it was an absolute statement with regard to the cost per day. It is not so. The statement in the paper is a relative statement with respect to the cost of the plan proposed. So that your argument is foreign to the matter altogether.

Mr. GRAY: Under your correction I would beg to remark that Mr. Wood's statement is to show, that a Naval Reserve is not dependent upon the Royal Navy, but is dependent upon the mercantile marine. If Mr. Wood shows that, he strikes at a fundamental part of Mr. Reddie's paper.

The CHAIRMAN: What Mr. Wood has been saying is perfectly foreign to the point—it has no bearing at all upon Mr. Reddie's paper. He has been talking, as I said just now, with respect to the cost "per head." It is not "per head;" it is a comparative statement. Mr. Reddie's plan would provide, not simply a Reserve in time of war, but a Reserve to meet all the exigencies of the State; and he proceeds to show

that the same sum of money which provides for calling out the present Reserve only in case of war, will provide a Reserve that will be suitable at all times. As you will see, if you will look at those tables, you constantly require, one year with another, 30,000 men, and those men are not available. It has been stated by Admiral Ryder that the effect of the Reserve is to keep men out of the Navy. Look at the Table on the wall (see page 292), you see that in 1861-62, the first entries were 1,414, and in 1862-63 they were 673. That has not been spoken to at all.

Mr. WOOD : I will endeavour to profit by your correction, and speak to the purpose. So far as the Naval Reserve, as proposed by Mr. Reddie, is concerned, it may be very ingenious in its details ; but there is this difference. It would be composed of men who have been discharged after ten years' service in the Royal Navy, or continuous service men.

Mr. REDDIE : It is not so in my paper.

Mr. WOOD : I understood you to say it would be composed of men who had served ten years.

Mr. GRAY : I would ask whether Mr. Reddie's paper in substance is not that the men who have served ten years, or continuous service men, shall form the Reserve ?

Mr. REDDIE : Not continuous service men—those who have served a commission. A commission is for three or four years. A continuous service man is a ten years' service man.

Mr. WOOD : I admit the correction. But I still contend that under the present system we obtain in the Naval Reserve, as at present constituted, men of far greater intelligence and greater respectability than the men that can possibly be included in the scheme of Mr. Reddie. The best men in the Navy remain in the service, because they obtain promotion as petty officers, and they are infinitely better off than the men in the mercantile marine. I assure you there are 1,200 men in the Naval Reserve who possess certificates as masters and mates in the merchant service. To them it can surely be no gain to belong to the Naval Reserve. We have 2,900 and upwards who have been petty officers in the merchant service. These men belong to the Naval Reserve, not from any profit attaching to it, but simply from patriotic motives. I am afraid I may move the ridicule of people present. I am not wishing to pourtray the British tar as he exists in the nautical drama, and in Dibdin's lyrics ; yet let us not go to the other extreme, and deny that he has that patriotism, that love for his country and honour for his flag, which I hope is common to all classes of his countrymen. These men must be far superior in their training, education, and intelligence. Though I do not know that that may be considered actually necessary, still I consider an intelligent body of men will always be more valuable than the men who have not those advantages. The Naval Reserve, as it is at present constituted, has now become a permanent institution. I think it is futile to attempt its overthrow. And even if its abolition could be effected, it should be regarded as a great national calamity, a cause of national regret that the one bond of union between the Royal Navy and the merchant service should be rashly severed. In geometric phrase it is the one point of contact between the two circles ; it acts as a connecting link, and has already, during the brief period that it has been in existence, considerably modified, if it has not completely extinguished the old dislike and reciprocated contempt that unhappily existed between those two noble services. They are beginning to learn more of each other, and to know that if the Royal Navy is the more glorious, the merchant service is the more useful, and that they are both equally necessary to the British empire. I thank you for the patience with which you have listened to me.

Commander DAWSON, R.N. : I will speak decidedly to the paper, and nothing else. I begin to compliment Mr. Reddie on having produced a very able paper, one which has excited more attention than any which has been read in this Institution since the hard-contested battle of the guns. This is the third night's discussion, and I think that is a compliment to which Mr. Reddie ought not to be insensible. I say this at first rising, because I think it would be a very great pity that any gentleman who has devoted his talents and time, and has come down here to read a paper in this Institution should go away with the impression, that however we may differ from him in opinion as to different points of that paper, we do not appreciate the trouble he has taken for us. With these preliminary observations I



will go through some of the arguments of the paper, as briefly as possible. Great exception has been taken to the question of the expense of the Royal Naval Reserve. The objections which have been raised appear to me to be equally applicable to any Reserve whatever, whether it be to Mr. Reddie's proposed Reserve, or to the Reserve that now exists. It appears to me that we cannot have in this country the blessings of free institutions without having some of their pains and penalties, and one of the pains and penalties is, that if we have not despotic authority, whereby to make the public weal compulsory upon the people, we must act by strong inducements. Now one of the strongest inducements is money; therefore we put money forward instead of despotic power. Reference has been made to the Prussian Landwehr. If we could only get Count Bismark to come here and take Lord Derby's place, there is no doubt we could get our reserves much less expensively. Also the *Inscription Maritime* of France; if we could only bring it to England, it would suit all our purposes. But we cannot import their regulations, unless we bring the French Emperor and his system with them. Therefore we must substitute monetary power; and when we compare the expense of the Naval Reserves with the expense of the Military Reserves, I think we shall see that we have not gone to any very great expense on this service. I see the cost of the disembodied militia and yeomanry amounts annually to £1,362,000.

The CHAIRMAN: I would ask you to contrast it with the proposition of Mr. Reddie.

Commander DAWSON: I am going to contrast it: that is, the cost of the whole of the Military Reserve, as contrasted with the Naval Reserve. If we were to carry out the argument that has been used in this discussion, it would appear that if we had ten years of peace we should have expended £13,000,000 on military reserves for nothing. But is that money expended for nothing? My impression is that the Volunteers of this country are doing the country a very great service. They are strengthening the hands of the Foreign Minister in all his dealings with Foreign Powers, and destroying those periodical panics that we had in this country; and so creating a sense of security. It appears to me, that it is very much the same as a life insurance. If a man insures his life, and he should live to 90 years of age, he may deplore that he has spent his money, but he cannot deplore that he has lived 90 years.

The CHAIRMAN: You will observe that that is admitted in the paper.

Commander DAWSON: I see the total cost of the Royal Naval Reserve is, according to the Navy Estimates, £210,111 annually. I find this has been compared by Mr. Reddie with the cost of the Royal Marines. Now let us go into that question clearly. The cost of 16,904 marines is £996,077; that is to say, you will find by a little calculation, that supposing we broke up the 16,000 men of the Royal Naval Reserve, we would get in lieu of it, for the same money, 3,642 Royal Marines.

Mr. REDDIE: Will you allow me to explain to you? I compared the expense of the existing Royal Naval Reserve with the wages of the marines.

Commander DAWSON: You compared two things that are dissimilar. You did not compare the wages of the one with the wages of the other.

Mr. REDDIE: Yes, I did; and if you will allow me, as it will save time, I can show that you are comparing two dissimilar things. You are comparing the wages of the marines, including the expenses of their Officers. Now this Naval Reserve has no Officers who are paid. I therefore compare the wages of the men in the marines who are doing service for you, with those of men who do not serve you, and I say that the cost of the men who do not serve you, is equal to the wages of 8,000 marines who do serve you.

Commander DAWSON: With all submission to Mr. Reddie, I submit that those additional 3,642 Royal Marines who would be kept in barracks, would be a reserve doing no duty for the country, so long as we have the misfortune—if it be a misfortune,—to be at peace, any more than the Royal Naval Reserve are, and that if war broke out, we should have by the present arrangement, instead of those 3,642 marines, 16,000 of the very best seamen in this country—in my opinion, from personal observation—exceedingly well trained. I must depart a little from the paper to notice one point in the discussion that took place. The Chairman has told us, as far as I

understood his words, that in the last five years there has been a waste of 5,000 men of the Royal Naval Reserve, that we have paid them money, but they have disappeared from the force, and we have therefore so much loss. We can only arrive at a just appreciation of this waste by comparing it with the waste of other services. Now I find in coming to the figures, that this represents a waste of  $6\frac{1}{4}$  per cent. per annum. Mr. Reddie assures us that the waste of the Royal Navy is 10 per cent. Admiral Ryder has told us it is 14 per cent. It may be quite possible that the Chairman was mistaken in the elements of his calculation.

The CHAIRMAN: The Chairman made no calculation at all. The Chairman merely stated a fact.

Commander DAWSON: Then I accept the fact, and I will show what the results of it are.

The CHAIRMAN: You had better keep to the paper.

Commander DAWSON: I will accept the fact that there is a waste in the Naval Reserve amounting to  $6\frac{1}{4}$  per cent. It to me is a very remarkable and most admirable circumstance, that the waste is only  $6\frac{1}{4}$  per cent.

Mr. REDDIE: How do you make out that the waste of 5,000 out of 21,000 is only  $6\frac{1}{4}$  per cent.?

Commander DAWSON: I make out that the waste of 5,000 in five years, is only at the rate of 1,000 a-year, and that 1,000 out of 16,000 would give a proportion of  $6\frac{1}{4}$  per cent. per annum.

Mr. REDDIE: The 5,000 is the waste during the whole time upon the whole number of men. It is certainly an extraordinary fallacy.

Commander DAWSON: I have no statement but that of the Chairman; I have no figures but those of the Chairman; and it is upon them that I proceed to say, that it appears to me that the waste of the Royal Naval Reserve is remarkably small.

The CHAIRMAN: You have not really got the facts.

Commander DAWSON: I have the facts that I got from you.

The CHAIRMAN: It is not the fact. It is a waste of 5,000 men upon the whole of the men enrolled. There are 21,000 men enrolled, and 5,000 have disappeared.

Commander DAWSON: 5,000 disappeared in five years, I believe.

Admiral RYDER: You may say in seven years.

Commander DAWSON: Knowing something as I do of the deplorable state and condition of the seamen of the mercantile marine, I am astonished that the waste is not greater, because not only is the term of life shorter in the mercantile marine, than in the Royal Navy, but the discipline of the mercantile marine does not correspond with that of the Royal Navy. Secondly, there is a great deal of desertion in the mercantile marine, which is not to be wondered at until things are improved, and that desertion must affect very considerably the Royal Naval Reserve.

Now, with these figures before me, and granting that I made some mistake, or that the Chairman made some mistake in placing the figures before us, and supposing the waste of  $6\frac{1}{4}$  per cent. does exceed that of the Royal Navy, then I think it can exceed it in a small degree. The best way to prevent that waste would be to improve the condition of the merchant seamen. There is also another consideration with reference to this waste. I can well imagine that the persons who were getting up this Reserve had at first little experience of that sort of thing, and may have made mistakes in entering men who would not be entered now; and that the waste of the last five years is no fair representation of the waste that will take place in the next five years. To proceed with the question of efficiency, Admiral Denman, speaking prospectively has asserted that 28 days' drill is insufficient. Now anything from Admiral Denman's pen will receive great respect from the members of this Institution. But it should be remembered that Admiral Denman was speaking theoretically; he was speaking before the formation of this Reserve. I am quite sure that if Admiral Denman were to go on board the training ships, and see these men drilled, he would come to the very same opinion that I have expressed respecting them.

The CHAIRMAN: Admiral Denman, no doubt (and it is fair to make the remark in his absence), considers that the training is far more important than the mere gun drill. You are speaking of the gun drill. Now the training for a man-of-war's man

is a very different thing from mere gun drill. Admiral Denman was speaking of the whole question.

Commander DAWSON: I am perfectly alive to these circumstances, but I can quite fancy that the Admiral was misled in forming that estimate, perhaps from thinking how 28 days' desultory drill, in the fashion it is conducted on board a sea-going man-of-war would eventuate. It is quite different from 28 days given consecutively, in periods of a week each, in a drill-ship, where there is nothing else to think of. I speak with some little experience of training men, and with all due deference to the Admiral. It may be urged, and I think very fairly, that what is quickly learned is quickly forgotten, and it may be asked, "supposing towards the end of the year's drill these men were put on board a ship of war, would they be found efficient?" I think it is a great thing if we can get out of the region of opinion into that of fact. What is the fact now? The experiment was tried very recently with a batch of men returned at the end of a year for their annual drill. They were sent to a gun, and told to secure it without instruction, then and there, as an experiment upon the spot. They secured their gun for sea in a proper seaman-like way. Then they were told to cast loose and prepare the gun for firing, and so on, and I am told they did it exceedingly well, exceedingly efficiently, in a very short time. Now a more serious objection has been raised to the Royal Naval Reserve, and that is to the inadequate numbers, the 16,000. It has been proposed, hardly seriously I should think, to raise the force in the Royal Naval Reserve, by reducing its pecuniary rewards, at page 20 of the pamphlet (see page 297).

The CHAIRMAN: I don't think that is Mr. Reddie's paper.

Commander DAWSON: It is proposed to raise the force of the Royal Naval Reserve at page 20, by reducing its attractions from £10 to £4 annually.

Mr. REDDIE: Where?

Commander DAWSON: Mr. Reddie himself, you will see, attaches very little importance to the suggestion; and I certainly do not.

Mr. REDDIE: Where?

Commander DAWSON: You will see it at page 20. I will read it. "We might for instance have a war rate of wages for A.B.'s in the Navy of £36 per annum, besides seaman-gunner's pay, badge pay, &c., to the more highly qualified men, and the Naval Reserve men, instead of being subsidized as now, during peace, might be only paid while under drill." That means to receive £4 a-year instead of £10, to put it into plain language. "And have this prospect of high wages in the Navy, held out to them during war, and when actually serving, the Reserve being made the door for entering the Navy." Then, again, a little further down on the same page, "We might limit the number of the paid men in the Reserve to, say 5,000 or 10,000, letting the present number gradually drop to that limit, and in future enter another 10,000 or 5,000 only as probationary reserve men, without pay, without any retainers except the pay they would receive while under drill, and qualifying to get on the paid list." There is an additional qualification to get on the paid list, and in the interim the wages are lowered from £10 to £4. You think to increase the attractions, by reducing the pay from £10 to £4. Yet the present attractions appear to be insufficient, as we have got too small a force now. It appears to me that no reduction of expense has been suggested by Mr. Reddie, which would not reduce these numbers instead of increasing them. My suggestion which I made and beg to repeat again is, that the qualifications for entry should be extended so as to include all men serving in fore and aft vessels, and that the term of service should be extended, and by those means we might increase the number of the Reserve. But in doing so, you must increase the expense, and I don't see how you are to avoid it. Another argument is, that the Royal Naval Reserve keeps men out of the Royal Navy, who would otherwise enter it. That has been reiterated by the Chairman also.

The CHAIRMAN: I gave you my authority, viz., Admiral Ryder.

Commander DAWSON: Now I give you my authority. My authority is Mr. Reddie. It appears at page 15 of his paper. It has been already quoted, but I think it will bear reference to again.

The CHAIRMAN: That is Admiral Ryder's, that is not Mr. Reddie's.

Mr. REDDIE: No.

Commander DAWSON: It appears that in the five years the Royal Naval Reserve has existed, from 1861-62 to 1865-66, there were entered 11,790, of whom 3,961 were pure blue jackets.

Mr. REDDIE: In these five years there were 31,207 men entered, of whom 11,790 were pure blue-jackets.

Commander DAWSON: But I am giving you the benefit.

Mr. REDDIE: But I do not want any benefit.

Commander DAWSON: I will tell you why I am giving you the benefit.

Mr. REDDIE: I don't want the benefit, I want the fact.

Commander DAWSON: I am giving you the fact. The fact is this, there are 7,829 of these men who had previously served in the Navy.

Mr. REDDIE: I have stated so.

Commander DAWSON: Very well, I know you have stated so; they are your own words I am giving. We read in a book by no less an authority than the Duke of Somerset, that for the last four years ships have not had to wait for men. Now Mr. Reddie supplies us with this argument, it is in his own paper, therefore how can we say in the face of that that the Royal Naval Reserve keeps men out? On the contrary, before the Royal Naval Reserve was formed, what was the fact? Why that £10 bounty was given to seamen, in order to induce them to enter the Navy. We have never had to make such additions since the Royal Naval Reserve was formed; on the contrary, we have the words of the Duke of Somerset, and they are worth repeating, that "as for men, during the last four years we have never had to wait for them." The question is, what is the objection of the merchant seamen to enter the Royal Navy? There is an objection, and it is one that it is very difficult to meet. The best merchant seamen have always objected to entering the Navy, and even when a £10 bounty was offered, the best seamen did not come forward. It was only the trash of the mercantile ports who came forward by thousands. What inducement is held out in this paper greater than the £10 to induce men to enter the Royal Navy? I do not see any sufficient inducement suggested where a £10 bounty failed to attract them. What is their objection? Let us get at that objection. The best merchant seamen hold a very high position with reference to their companions and with reference to their Officers, in their several ships, in which they are looked up to, and respected, and are holding, virtually, almost the position of petty officers. But when the best merchant seamen come to the Navy, they have to begin life again at the bottom of the ladder, and ascend to the top. No doubt if a man comes in young, he might with a little spirit work his way up to the top, and form a very excellent petty officer; but if he comes into the Navy in middle age, say between 25 and 30, the chances are very much against him that he will ever rise. He will find himself in an uncomfortable position and circumstances; and in a lower position than he was in before. That is one ground why the best men will never enter the Navy except under some strong inducements, which we have not yet got. There is another reason why the best men do not enter the Royal Navy, particularly those of the Royal Naval Reserve, who belong generally to the northern ports and who being most respectable men, belong to benefit societies like trades' unions. These societies have a rule, that if a man enters the Royal Navy he will forfeit the whole of the benefit of his deposit. This is an alarming discovery. If this be the fact, then the Government should provide a benefit fund, that is to say, something corresponding to such benefit societies, and allow the men to contribute voluntarily. This would be costless to the Government, and would meet that obstacle which has been raised.

Mr. REDDIE: May I ask whether that rule applies to the Royal Naval Reserve when they are called upon to join the Royal Navy during war?

Captain DAWSON: I do not know.

Mr. REDDIE: Because I think that is very important.

Mr. GRAY: The Act recites that any person having any benefit in a benefit society shall not forfeit that benefit if he join the Royal Naval Reserve. It is an express provision of the Act of Parliament.

Captain SELWYN: Under those circumstances some of the societies have ceased to exist—have been broken up.

Commander DAWSON: A mistake has been made in thinking it necessary to

destroy one Reserve in order to build up another. That appears to me to be a paramount mistake, because there is room for both Reserves, and for a great many more Reservements. I think Mr. Reddie has made a mistake in not putting forward his Reserve as an additional one rather than as a substitute for the one in existence. This is a somewhat serious mistake. The Admiralty had until recently a very bad name with reference to breaking faith. The traditional policy was supposed to be that of breaking faith with the seamen, and it appears to me, if you were to reverse, in the present generation, what has been done with reference to the Naval Reserve, you would certainly lower the influence of the Admiralty.

The CHAIRMAN : There has been no proposition to that effect.

Commander DAWSON : There has been a proposition either to abolish the Reserve or alter it altogether.

The CHAIRMAN : No, an equitable arrangement, and equity does not mean that.

Commander DAWSON : It appears to me that either to abolish or to seriously alter would be to go back to the system I have condemned. There is one part of the Reserve which has been very mysteriously left out, whether it is that everybody considers it as a useless Reserve, and therefore nobody mentions it. There are the Naval Coast Volunteers. It is a cheap Reserve, it only costs £25,000.

Mr. REDDIE : May I interrupt you ? Remember this has nothing to do with manning the Navy.

Commander DAWSON : It has to do with Naval Reserves, inasmuch as these men would be called out if they agree not to chase an enemy beyond 300 miles from the land.

Mr. REDDIE : I have noticed the Reserve merely in reference to manning the Navy.

Commander DAWSON : Manning the Navy is the only thing the Naval Coast Volunteers are enlisted for. As I do not wish to occupy time, I will pass on rapidly. It appears to me that Mr. Reddie's proposal in reference to the Reserve is really taking a retrogressive step. It is going back from the continuous service system, which has been one of the greatest benefits to the Navy in the present generation. To reverse that system would be a very great evil, and would launch us back to the old, bad want of system. We would discharge men at uncertain periods, and then expect them to come into the Reserve, and why ? The inducement of £10 is now offered to any man who on leaving the Navy chooses to go into the Royal Naval Reserve. Now, does he enter it ? He does not. If joining the Reserve is not to be compulsory what is to be the inducement ? If £10 are insufficient, you must give much more than the present sum, and so raise the expense of the Reserve. I do not see how you are to do it without. Another question is, how is this Reserve to be called out in time of peace ? It is a very pretty theory, if you can get these men to come voluntarily in peace. There is, I grant, a great difficulty about these "contingent" seamen, and I think we should be very glad if Mr. Reddie's plan would meet the difficulty. Suppose you have these men in the Reserve, how are you to get them back into the Navy ? You must take them as they stand on the roster. Say you have 10,000 Reserve, and want a couple of thousands to man the ships. You cannot take them in their order, because half of them may be in the East Indies or in the Pacific. If you call them out *en masse* you can get them, because you send out to the different stations, and capture the men and draft them on board. But, how are you to get them in rotation, in time of peace, without sending out search warrants to search the ships in the different ports, and take the men at an inconvenience to the shipowners ? I do not think the shipowners would like these men to man their ships under such conditions. There has been a great question about the Reserve rigging the market against ourselves. Any Reserve will do that, as far as I can see, unless you are prepared, when you call out the Reserve man, to give him his wages in addition to his pension in time of peace. If you do not do that, I do not see how it is possible to form any Reserve that will not, except under some very expensive system, rig the market against ourselves. It is quite evident that the inducements at present to enter the Royal Navy are insufficient, and it appears to me that the inducements that Mr. Reddie has brought forward to induce the merchant seamen to come into the

Navy are not likely to be much more productive than the present ones, or than that £10 bounty which failed the other day. I will not go into the question of substituting the sort of Reserve that I proposed the other night, of ten years' service men. I am aware that it is open to certain objections; I shall be happy to hear those objections. I have made objections in reference to Mr. Reddie's Reserve, and I shall be glad to hear objections to my Reserve. I only throw it out for the purpose of discussion. My proposal was, that after seamen have served ten years in the Navy, they should be put into a short pensionary service, and that they should receive an additional pension in case they agreed to serve in the merchant service for six months every year. The objection of course will be raised to that, that that must increase the number of boys in the Navy very largely, and it is a question whether ships of war may be safely navigated with so large a number of boys. That is a question open to discussion. It appears to me that there is one great inducement to serve in the Navy, which we might offer to the best class of merchant seamen, that is, if the Government would expend as much money on the seamen's families as, for instance, it expends on the soldiers' families—it has been spoken of in the naval papers for the last few weeks:—if they were to build model lodging-houses at each naval port, for the families of our men-of-war's men during the time they are serving the Queen, and let these to the seamen during that time at a rent which would pay back a fair interest, say of three or four per cent., to the Government for their money, these homes being managed by the Admiralty in all respects, and the sum for them being advanced by the Government. It may seem that the sum would be a very large one; but I think if £50,000 were expended for two or three years—much larger sums are annually expended for soldiers' families (in the Army Estimates you will see it is a much larger sum), and it would be only lent for three or four years instead of being given, as in the Army, absolutely for ever, producing no return; this would be an inducement to steady merchant seamen to come forward and join the Navy, from the fact of their being able to place their wives and families in these homes; and when they left the Navy, from desertion or any other cause, they would have to turn out of these houses. In the meantime, the houses would be paying three or four per cent. to the Government for their money.

The CHAIRMAN: Do you think that is pertinent to the paper?

Commander DAWSON: I am pulling to pieces the inducements which Mr. Reddie has offered, and I think it is only fair that I should propose another inducement.

The CHAIRMAN: But that is not the subject. We shall never get Mr. Reddie's paper discussed. It would be better to read a fresh paper on that subject yourself.

Commander DAWSON: I will not occupy your time any longer.

Captain TOYNBEE, F.R.G.S., Mercantile Marine: I have heard the paper and the discussion upon it with very great interest, and consider it a national subject. I cannot say much for the practicability of Mr. Reddie's system, because it seems to me, to have given it full force it should have been brought forward when there was no Naval Reserve, and when we were going to reduce the Royal Navy. In that case it would, so far as I am able to judge, have been an excellent proposition.

The CHAIRMAN: He is contemplating that, of course, unless the plan be adopted before hand, it could not be applied on any reduction being made.

Captain TOYNBEE: Viewed from the present position of the Royal Navy, it reminds one of the Irishman, who, wishing to lengthen his blanket, cut a piece off the top and sewed it on the bottom. You want a Naval Reserve, and you reduce the Navy, which is now not large enough, in order to make a Reserve, but it has one peculiarity—it is an improvement on Paddy's idea, because after you have bought a piece of blanket and sewed it on—after you have got one Royal Naval Reserve, you are proposing to reduce the Royal Navy, to make another. If you will allow me, I will say a few words on the popularity of the Navy.

The CHAIRMAN: Do not you think that is foreign to the subject? At my request, Mr. Reddie left out the question of discipline, because it would raise questions that were foreign to the subject.



Mr. REDDIE: I may remind Captain Toynbee, that when I went to the Society of Arts and discussed his paper, I did not wander from the subject.

The CHAIRMAN: It was on the express condition that that question should not be gone into, that Mr. Reddie withdrew that point.

Captain TOYNBEE: I will sit down if you wish, but it seems (if possible) more important to know how to keep first-rate seamen in the Royal Navy than how to get young men to enter. It is said that a certain number of good men are dissatisfied and leave the Navy, and my argument tends to show how that drain may be prevented by making the Navy popular. This subject has been a consideration with several for some time. I believe the popularity, discipline, health, and general improvement of the Navy would be met, if you would do what Captain Dawson has just suggested, that is, consider the wives and families of our seamen. It is astonishing that in a nation with Acts of Parliament now being brought in to improve the dwellings of the working classes, such great employers of labour as the Government, should not set us an example. Social science has advanced far enough to show us that men are what women make them. Woman's influence is known throughout the world; and that woman has two influences is equally well known. Now I think that the sooner we bring about the useful influence of woman the better. She can reduce the doctor's bills; she can reduce the number of days your men spend in the custody of the police, and she can help your chaplains in their good work; or she can do very much to the contrary. I think Christianity and common sense combined—and we profess to be a Christian country—should prompt the Admiralty to build married sailors' homes, and let them to seamen, so as to pay a sufficient amount of interest for the money. They should be placed under the superintendence of a Warrant Officer. To show that I am not speaking contrary to the feeling of the men in the Navy, a friend of mine wrote to a man-of-war now in commission, to ask the chief gunner—one of the best men, I understand, in the Royal Navy at the present time—respecting the subject. Here is a copy of his answer:—"I hasten to reply to your note. I at once saw some of our married men, and put the question to them. I only wish you had been present to have witnessed the reply. Nothing that I know of would conduce more to the comfort and happiness of the seamen than to provide proper accommodation for their wives and families at a lower rental, such as the Government could afford to do. One man told me to-day, that at New Passage he pays £6 per annum for one room, when I feel certain the Government could give him two nice ones for two-thirds of the money. It is a subject I have frequently talked of, and six years ago I told Mr. Coram, our Lord of the Manor, that if he would build two or three rows of small houses, he would soon get them filled by the naval population, for the Warrant Officers are obliged to go two or three into one house, at enormous rents. Anything you could say towards obtaining accommodation for the married seamen, would be deeply appreciated by them." I say it is human nature, that if you want to chain a man to his country, or to keep him steady, you must consider his wife and family.

Captain SELWYN: I had wished to speak further on the subject, but as I know Mr. Reddie has to reply, and it is now already very late, and he has a great deal of attack to answer, I would only beg to lay before the meeting the one thing which appears to me to have been ignored by both parties in this discussion, which is, that the Reserve is not a means of manning the Navy at all. If you want to man the Navy, you must recur to some system like the apprentice system, or you must do something to increase the number of men. Does any one mean to tell me, on looking at the tables, that if one of these sudden European wars which we are at this moment dreading, was to break out in the East, we could raise by any of these wretched devices we have been talking about, the number of seamen, as was done, from 67,000 in 1803, to 147,000 in 1813? It is utterly and totally impossible. The men do not exist. Such men could not be had, if you gave gold for them beyond description. Let us also recollect that no difficulty was felt by the Americans, who manned an enormous fleet by the simple expedient of paying more highly. We have little pennies given for every possible thing; so many that the sailor is perfectly puzzled to calculate what he ought to receive. Give him more wages, and he will allot better, and his wife will get better lodgings.

Commander P. H. COLOMB, R.N. : I shall crave the indulgence of the meeting for speaking at all, seeing that it is so late ; more especially because I was unfortunately prevented from hearing the reading of the paper, or the last discussion. Therefore, it is quite possible I may be saying what has already been said. Still, I think the subject is so important, that perhaps you will pardon me if I detain you for a very few minutes. I notice four chief allegations in the paper. The first appears to be, that equal efficiency in all branches might be more cheaply obtained. Of course that is a very wide question, and I could not attempt to discuss it in any way, except to make the remark, that I think the money spent upon the Navy is not altogether non-productive. I notice as the estimates come round yearly, in the columns of the *Times* and other papers, how the ten millions which are voted, are spoken of as an enormous sum. They want to know where it goes to, &c. I think we should all recollect that as commerce increases, the cost of the Navy necessarily increases, because the commerce of England cannot be carried on except under the wing of Her Majesty's Navy. Therefore I think we cannot come to general questions of expense without mixing up with it the collateral question of the increase of the commerce of England. The second allegation appears to be, that the standing force of the Navy is at present in excess. It is not quite clearly put in the paper, but it appears to me to be insinuated that the standing force of the Navy is now in excess. Now I think that if the standing force of the Navy were now in excess, we should have a surplus of men doing nothing ; but it seems quite clear that we have not got them. That seems to be a question of feeling. I think, considering the two points, first of all the enormous increase of our commerce with China, the opening of the ports there and in Japan necessitating an increase of forces in China ; and considering the exceptional state of affairs in America, also necessitating there an increase of our force, it would be very difficult to show that the standing force of the Navy is now in excess. The third allegation appears to me to be, that the supply of boys is now sufficient. This first depends, of course, upon what you consider the proper standing force of the Navy ; secondly, you must consider it as regards the waste of boys. I am not going into the question of figures. If I had any tendency before I came to this Institution, to be betrayed into entering upon figures, that appalling mass that I see before me would effectually rout my desire. So I am not going into figures ; I am only going to say that it is sufficient for my purpose to assert that the waste of boys, from two competent authorities, is given as widely different.

Mr. REDDIE : I will put you right about that. Admiral Ryder and I do not differ about that.

Admiral RYDER : No.

Mr. REDDIE : At all events the Admiral says the waste of boys is nine per cent., and I allow ten per cent.

Admiral RYDER : I take it at less than ten per cent.

Commander COLOMB : Then I must be a little out of order, and ask Admiral Ryder why, if he does not estimate the waste—

The CHAIRMAN : They both agree in principle that the waste of seamen must be kept up by boys. Then the question of waste cannot be determined here ; it is a matter of fact.

Commander COLOMB : I will take it this way, to get rid of the question of waste. I will say that two competent authorities say, the one that the supply of boys is sufficient, the other that it is not.

Admiral RYDER : Quite so.

Commander COLOMB : It is quite sufficient for me to know that there are two estimates given, one of which is larger than the other, and both by competent authorities. It is enough for me to assert that the larger estimate must be taken, because if you have made a mistake in your supply of boys, in the training of them, you cannot recover that. If your supply of boys is deficient for any number of years, that number of years remains a gap. Therefore I think that when two authorities, competent to give us information, tell us that in one case the boys are sufficient, and in the other that the number ought to be doubled, we must, as a matter of common sense, take care to re-estimate them. The fourth allegation is that the Reserve is costly, and not of the best. It has been found fault with, that it is not a feeder of the Navy. It

was quite news to me to read that it ever was supposed to be a feeder of the Navy. I never imagined for a moment that it was intended as such. I thought the Reserve was a specially distinct force, only to be called out in times of trial and danger.

The CHAIRMAN: The allegation is, not that it is not a feeder of the Navy, but that it hinders men from coming into the Navy.

Commander COLOMB: I put it in milder terms, you put it in stronger terms. I say that the Royal Naval Reserve is not a feeder of the Navy; that has been adverted to by Captain Dawson, and I think answered. There is one point which has not been referred to to-night; I am not sure whether it was touched upon in the last discussion; but I think there is one point which we ought to have noticed, and marked very carefully, and that is that we acknowledge that the standing force of the Navy will be a shifting number. Political exigencies will reduce it in times when possibly the majority of Naval Officers will be of opinion that it should not be reduced. But there is this to be said, that when the number of men serving in the permanent Navy is reduced, your Reserve will be at the same time reduced, so that instead of having the comfort and security of a Reserve which does not depend upon political exigencies, you will be depending on a Reserve which these political exigencies may at any moment deprive you of. I think that is a very strong point. I think the Reserve, as a matter of principle, should be kept altogether distinct from and independent of the force of the Navy, which is regulated by Act of Parliament. As regards the overflow, I quite agree with the writer of the paper, and with some of the speakers to-night, who have said that it seems desirable that the overflow from the Navy should be retained. How we are to retain it, is another question. It has been pointed out that if we allow them to go into the merchant service, theoretically we retain them, but practically we do not, because they go abroad, and we do not get them. I should say, putting them into something like the Coast Guard, and drawing them again from that force when they are wanted, would be a more statesmanlike and prudent mode of dealing with the question. There was one assertion also made, that this overflow from the Navy would not require the training which is now required by the Naval Reserve to keep them ready for service; that men who had served from three to five years in the Navy might be discharged into the merchant service, and be ready to serve; and that we would save the cost of a yearly training. Now I do not think that anybody who has had to deal with the men, can believe that they can be kept efficient without something like a yearly training. I do not think you will save that expense. I have only one more remark to make. I noticed a sort of—what shall I call it—a double-breasted apothegm in Mr. Reddie's paper—"Save well during peace that you may pay well during war." It is of a character with some other apothegms of the same description. There is one very well known, that is, "Stuff a cold, and starve a fever," which is exactly a similar thing. The two, unfortunately, as well as being double-breasted, are double-edged. They will attack the person who uses them in a direction which he little expects. "Save well during peace" and you will certainly pay uncommonly well during war. I do not think it is possible for us here at this meeting to give any adhesion to that sentence, with the example before us of America, which was saving uncommonly during peace, and which has now accumulated, during a few years of war, an enormous debt, which it is doubtful they will ever pay, although some people say they will; and, on the other hand, of Prussia, which did not save well during peace, but expended a proper and judicious amount upon her war forces, and was able, in a short campaign, to do everything that she wished to do, and is now clear of debt.

Mr. WHITEHEAD, Registrar-General of Seamen's Office: The course which this discussion has taken must be, I think, eminently gratifying to the numerous supporters of the Royal Naval Reserve; and none have more cause than they have to join in the vote of thanks to the hon. gentleman who originated the discussion. Any one who may have come into this room and listened to the debate, without having listened to or read the paper which gave rise to it, might have supposed that this meeting had assembled for no other purpose than to glorify the Royal Naval Reserve, so ample has been the praise bestowed upon it. It is not every Institution which has the advantage of being so publicly lauded as the Royal Naval

Reserve, or of receiving those encomiums that it has received here, which, coming from gentlemen of high official standing as well as practical experience, entitles their opinions to the greatest credit. But the gratitude which the Royal Naval Reserve supporters for this reason undoubtedly feel towards the hon. gentleman, is considerably tinged with a feeling of indignation when they reflect upon the injury which might have been done to an admirable institution had these statements which the gentleman has so laboriously compiled, been permitted to go forth without question. It is a pleasant thing to know that these statements have not been promulgated by an unseen hand; and we may safely surmise that, if not exclusively confined to the hon. gentleman himself, they are shared by a small coterie of gentlemen whose policy is obstructive, and who are as weak in numbers as— (Order, order.) I wish more particularly to refer to three points which the hon. gentleman has raised in objecting to the Royal Naval Reserve. The first rests upon a combination of figures whereby he has endeavoured to enlighten us as to his notion of matters of public economy, and the two others rest upon his assertions, which are not supported by facts, and which are contrary to reason and experience. In fact, some of his assertions contain such extraordinary mis-statements, such disregard of events which must be perfectly well known to every one who has had the least to do with the Reserve, that I can only account for it on a theory, which may be as startling as some of the gentleman's own statements, viz., that I believe he must be an ardent admirer of the Naval Reserve.

The CHAIRMAN: You are really not speaking to the paper. Your remarks are personal, instead of being to the point.

A VISITOR: If the Chairman would only bear in mind that every time he interrupts a public speaker he knocks the breath out of him. If I were a speaker, I would call upon the audience to support me.

Mr. WHITEHEAD: The three points I wish to draw attention to are, first, the objection the gentleman has raised to the Naval Reserve on the score of expense. This is a financial argument. The other is an objection he has raised, in saying that it keeps men from joining the Navy. And the third is the imputation cast upon the men of the Reserve themselves, that they will not be found available when wanted.

The CHAIRMAN: There is no such statement in the paper.

Mr. WHITEHEAD: I think there is.

The CHAIRMAN: I beg your pardon; it is not so asserted at all.

Mr. WHITEHEAD: The words in the paper are, that they may be "backward in coming forward," and that means, if it means anything at all, that they will not be found available when wanted.

The CHAIRMAN: Will you speak to the point?

Mr. WHITEHEAD: One of his objections is on the score of expense.

The CHAIRMAN: Then will you speak to the actual question of expense, and not go off into abstractions?

Mr. WHITEHEAD: It is the Lecturer's objection to the Reserve, on the score of expense, that I wish to do away with. I think the Admiralty ought to feel it a very gratifying fact that they can have a force of 16,000 men, well trained, well drilled, and able in all respects to take their station on board a man-of-war, when called upon in case of need. These men are not common ordinary men that you can pick up in the streets, the highways, and bye-ways. Some of these men are, in point of *physique*, superior to the men in the Navy.

The CHAIRMAN: There has been no question of that kind raised—no question of character.

Mr. WHITEHEAD: The hon. gentleman has thrown an imputation upon the men of the Reserve, and I merely proceed to show that they are a valuable body of men. Men who have been rejected for the Reserve, it is a well-known fact, have afterwards been admitted into the ranks of the Royal Navy. It ought to be a gratifying thing to the Admiralty to have a force of 16,000 men, well drilled, and well trained, ready in time of need for any emergency. They ought to feel it a gratifying fact, because they cannot get such seamen as these anywhere. Able seamen are not like poets. Every one knows, *non fit, poeta nascitur*. But the able seaman, on the other hand, is not born an able seaman, but must be formed by years of toil, and by years

of apprenticeship to his profession before he can take his rank as an A.B. The hon. gentleman says these men will not be found available when they are wanted. This imputation has been already handled by those gentlemen who have a better acquaintance with the seamen than I can possibly have.

The CHAIRMAN: All this is quite foreign to the paper.

Mr. GRAY: If Mr. Reddie says that the Reserve men will be backwards in coming forwards, I submit, under correction, that it is the duty of every man who thinks otherwise to controvert that assertion as strongly as he can.

Mr. REDDIE: Mr. Reddie has not said so.

Mr. GRAY: Mr. Reddie has said so. He has said the seamen are backward in coming forward.

Mr. REDDIE: Mr. Gray is stating what is not correct.

Mr. GRAY: Will you read the passage?

Mr. REDDIE: No; I leave myself in the hands of the Chairman.

The CHAIRMAN: I say this is perfectly foreign to the subject, and as it is now ten minutes to ten, I will now call on Mr. Reddie to answer the objections that have been raised.

Mr. REDDIE: I shall not pretend in the least degree to reply to the remarks of the last speaker. I think they will not be of any disadvantage to me, when his speech comes to be read alongside my reply, although I have taken no notice of it. I shall proceed to notice a few of those remarks that have been made this evening, that are worth replying to, while they are fresh in my memory. With reference to what Captain Colomb said last, about saving well during peace, in order to pay well during war, if I am wrong in supposing that the Landwehr is not an expensive force, he has made a point against me, and I think the only one. As regards the yearly training of the Reserve that I propose, as not being possibly dispensed with, I can only say that the men of the French *Inscription Maritime* are not drilled in this way. I believe, in reckoning the comparative forces of the Reserves of the two countries, the whole 90,000 seamen that form the mercantile marine of France, as against our 350,000, are generally reckoned as all able seamen, from their admirable system which passes their seamen from their Navy into the Reserve. With reference to Captain Selwyn's remarks, I must point out, as I have done already in my paper, that any increase in the number of boys you like to train for the Navy, will never enable you to swell your force suddenly. You may train a large number of boys if you choose; and Admiral Ryder, who has proposed that, in the voluminous papers which he told you he has laid before successive Boards of the Admiralty, has not only seen that the consequence would be that he would have a large excess of seamen, but he has actually told us how you may get rid of them when they grow up. If you enter a large number of boys annually, they will grow up whether you will or no; and if you want to increase your men by 20,000 or 30,000, you could not get them out of the boys. When you had that large force of 147,000 seamen in 1813, you had no boys at all, and that force was then drawn from the comparatively small mercantile marine of this country.

Admiral RYDER: No boys?

Mr. REDDIE: No boys in 1813.

Captain SELWYN: It is quite a mistake.

Admiral RYDER: I thought there were powder boys on board ship.

Captain SELWYN: Pardon me, Mr. Reddie, for just correcting you. I do not think you quite comprehend what I said. I did not propose increasing the boys, but increasing the whole number of seamen available for the Navy.

Mr. REDDIE: Admiral Ryder spoke of increasing the number of boys. I think Captain Selwyn answered very wittily Captain Toynbee's and Captain Dawson's Utopian proposition to build cottages for our seamen. Really those philanthropic views are not practicable. If men were in office, and had to get money from Parliament, they would find the difficulty of it; and, moreover, if they had as much experience as Admiral Ryder has of Government cottages (which we have to a very great extent already in the Coast Guard), they would scarcely, if they were men of business at all, think of putting forward such a proposition, which I might almost term preposterous—

Captain TOYNBEE: I mean the model lodging-houses, such as Waterlow's Buildings; they pay 5, and even 10 per cent.

Mr. REDDIE: I beg leave, after three nights' discussion, to be now allowed to reply. As I have reminded you, in the Society of Arts discussion, I did not wander from the subject. I now come to Captain Dawson. He had some difficulty to know how to get the Reserve men to go into the Navy upon my proposition. He apparently overlooked what is plainly put into the paper, that a part of my plan is, to make the Naval Service preferred. It is a course I have long advocated, and it is a course advocated in the admirable book, which is attributed to Admiral Denman. The moment you do that, there will be no difficulty in getting your men back. And it is part of my plan also—which appears to be overlooked by those gentlemen who have been so very quick in speaking upon it, but do not seem to have studied it much—a part of my plan is, that the retainers should be what the men receive for, say, good conduct badges, and other special qualifications, and for these they would take the pay with them, whether they went into the Reserve, or into the Navy. So I think there is no difficulty at all, by my plan, of engaging men to return to the Navy when you want them. Captain Dawson says, which is a very important fact, if it be a fact, that our men, the Navy men, do not go into the Reserve. I was indeed thinking that that was perhaps a redeeming point, as regards this Reserve of 16,000, that probably a considerable number of them were men-of-war's men, who, even if they had not the benefit of an annual training, when they found themselves again in a ship of war, would have been ready to take their places at the guns, and do, after years of experience, what this gentleman tells us they can do after 28 days' training, when taken from the mercantile marine. Then, with regard to the Royal Naval Volunteers, I was sorry to interrupt Captain Dawson about them; but the reason I did so was, that they have never been regarded except as men to be called out "upon an emergency." I should not have mentioned the Naval Reserve at all, had it not been that I wished to propose a plan which would enable you to man your Navy in peace as well as in war, and not merely in an emergency. I should mention that when Sir William Parker's committee was formed, in 1852, what was remitted to the committee to enquire into was, the best mode of manning the Navy in peace as well as during war. Admiral Ryder's statement (which has been repeated even after it has been corrected—and in ignorance attributed to me) that the Reserve does stop the manning of the Navy—is very serious and important. I think I have pointed out that this was quite contrary to the intention of the Board of Admiralty, who instituted the Reserve, by taking the tenor of the remarks in this pamphlet upon *Naval Expenditure*; and I cannot understand in the slightest degree those expressions of Captain Dawson's about "breaking down the wall of partition" between the two services; which phraseology I find he has copied from the gallant Admiral, who tells us in a pamphlet, a copy of which he was good enough to send me, that the "partition wall" between the two services is broken down by this Reserve;—as it appears that though that "partition wall" is broken down, there is still, upon the very theory of these gentlemen, to be a great gulf fixed between the two services. As Mr. Gray put it, in a very plain and business-like manner, which came well from a gentleman from the Board of Trade.

Mr. GRAY: I object to that statement, as I do not represent the Board of Trade.

Mr. REDDIE: Perhaps so; but I repeat it came well from a gentleman from the Board of Trade that the merchant seamen were to take their retainers, and we were to keep our men. As regards Captain Dawson's estimate of the waste, I am almost sorry for him that he should make out that 5,000 taken out of 21,000 is only six per cent.

Admiral RYDER: In the year.

Mr. REDDIE: Never mind that. This waste is taken upon the gross numbers of men in all the years, and the percentage is the same. If you take the numbers you had in 1861, and take the waste upon that, you will not find that you had then 21,000 men to deal with. I will, however, leave that. If Captain Dawson is content to have his estimate stand, of course it must stand. The reporters are great men in a discussion, and some will begin to repent of the things they have said in this



Institution bye and bye. Then Captain Dawson is under one misapprehension, which I think I can clear up. He told us that we required to give a bounty to get men in 1859; and that, before that, we could not get them. I am very anxious that Admiral Ryder especially should understand the facts of the case. This is a return that has been in his hands much more than it has been in mine.

Admiral RYDER: What is the heading of it?

Mr. REDDIE: It is "The Waste of the Navy," a paper with which you are well acquainted. It is a return that I have always placed at your disposal, and which you have gone frequently over, but which you do not appear to have mastered. I am therefore anxious that you should keep in mind some facts that are in it. And as Captain Dawson seems to have had the benefit of your views—

Admiral RYDER: I beg to say that nothing has passed from me to Captain Dawson on the subject.

Mr. REDDIE: I only say it seems so. I dare say I am mistaken.

Admiral RYDER: You are mistaken.

Mr. REDDIE: It is a trifling point if it were so, but I want to point out that in 1858-59, 4,365 men joined the Navy as "first entries," and of these 3,504 were pure blue jackets; and consequently came from merchant ships. That was before we gave a bounty. The next year when the bounty was paid, we entered 11,600 men, of whom 9,976, or in round numbers 10,000, were blue jackets.

Commander COLOMB: What was the reduction of the Navy the year before?

Mr. REDDIE: There was no reduction in the year before. I am speaking of the first entries.

The CHAIRMAN: You have got the return: it is "First entry."

Mr. REDDIE: I think I have now disposed of every point of importance that I recollect this evening. I have not noticed the eloquence of Mr. Wood, because I did not quite see how it bore on what I said. However, he will have the benefit of it all in print, and those who read my paper will have the advantage of reading his remarks. I shall now proceed to take the previous discussions. I am sorry to say we have not got last night's discussion in print, but I have got the first, at all events, and I think I have a tolerable recollection of the second. I will take the speakers as well as I can *seriatim*. Admiral Ryder, you will recollect, moved the adjournment of the discussion, and with that great discretion which no doubt distinguishes him, he reserved his fire. Captain Dawson, however, would tell us of the admirable training that the Naval Reserve had undergone, though he said they did not fire their guns in the "fly-away style" of men-of-war's men. But he opened fire upon me in a very "fly-away style." And not content with opening fire here, I find he had been opening fire before in *Fraser's Magazine*. He was kind enough to tell me of it, but I have had no time to read his paper; and after that he opened fire last week in the *Hampshire Telegraph*, on the same subject; and he has again spoken to-night. But he always, as far as I can see, fires in a different direction. It is such loose practice coming from a gunnery officer, that I do not know very well what to make of it; as such loose shot cannot all hit. Several of them have fallen short; several of them have gone over my head. I do, however, find that one shot hits my paper, that is absolutely to approve of it. He is very fond of Reserves; I do not know how many he wants, but he thinks I have brought forward one very good suggestion to supply a part of his Reserves. Why I do not propose that as a Reserve, only along with some others, is because I am quite certain that if you have a real Reserve, such as they have in France, of men afloat, or such a Reserve on shore as they have in Prussia, no statesman who has the management of the affairs of the Admiralty, and no Commander-in-Chief, would ever wish to have a Reserve of less qualified men:—he would never turn from men-of-war's men to any other class of sailors. I say this without depreciating the character of the merchant seamen, which I beg leave to say I have not done in the slightest degree, or in any manner, in my paper. He thinks that the proposition that I have made, to secure a Reserve to fall back upon in case of a sudden maritime struggle, will not meet the requirements of the case. That shot, I think, falls short of me, for I do not know that I restricted the Reserve to any number. The difficulty I should have, as I

shall hereafter show when I come to Admiral Ryder's figures, would be rather to restrict the amount of the Reserve, than to get it up to 16,000. Of course, as I have said, the breaking down of the "wall of partition" seems merely a way of talking about the thing; for in Captain Dawson's speech on the first night, he had scarcely expressed himself in these terms, when he went on to say that according to his mode of manning the Navy, he would never require to get men from the merchant service! Therefore, we might just as well have the wall up as have it down, if we are not to get men from the merchant service. These are contradictions which I cannot understand; and I think when people come to study these things a little more calmly than they have managed to do in this Institution on this occasion, they will perhaps change their opinions upon some of these points. But there is one other point in Captain Dawson's speech the first evening, which I shall notice, for I reserve his difficulties about the merchant seamen until I come to deal with Mr. Gray, who is perhaps more responsible for those figures, as to which he interfered to correct me. I come now to the last point in Captain Dawson's speech. He wishes the Reserve to be three times its present size. He wishes that we had not only 16,000 men, but 48,000 men; and what is his reason? His reason is: "We might, perhaps"—he speaks, you observe, with very great caution—"we might, *perhaps*, be able to lay our hands on 30,000 or 40,000 in case of war." This is very much like the loss we have got here between the 21,000 and the 16,000. You are to have 48,000, and *perhaps* you may be able to lay your hands on 30,000 or 40,000 of them! I do not know whether these gentlemen, who have been accusing me of attacking the merchant seamen, will also attack the gallant Captain.—I am quite sure if they do, they will have a volley in return, "For (he adds) we must allow a large margin for persons whom we could not get"—a margin of between 8 and 18 thousand!—

Commander DAWSON: Sickiness must be allowed for.

Mr. REDDIE: Well, about sickness in the Naval Reserve, if we remember that a Volunteer must be a British subject, free from infirmity, under thirty years of age, I must say that the failures on account of sickness, that result in death are very large—frightfully large. Then we have to deduct for men who have joined the Navy 473; and for men discharged 953. Both he and Admiral Ryder speak of weeding this Reserve, and you see it has been weeded. Then there is the number who have died—no less than 1,523; and then there are the men who took their retainers for a time, and never come back, 2,285;—Total waste, 5,234.

Admiral RYDER: In seven years?

Mr. REDDIE: How many had you seven years ago in the Reserve?

Admiral RYDER: None.

Mr. REDDIE: Just so. Six years ago you had not 3,000. It is within much less than five years that the bulk of these men have been enrolled, and gone from you. It is no use trying to blind the eyes of any one about this question. It is quite clear that nothing could be done upon my paper, and still less upon any speech delivered here, without a thorough inquiry by competent persons. It is quite clear from the whole tenor of my paper that I never thought of anything else; therefore, I have been the more surprised at the extraordinary tone that has distinguished many of the speakers throughout. I now come to the Chairman.

Commander DAWSON: Before you leave me, would you allow me to say that nothing personal to yourself has been said by me?

Mr. REDDIE: The Chairman's remarks I need not go into, for, on the whole, I do not think he had an opportunity of going into the full scope of the question. As he put it, he was rather favourable to my views. Then I come to my friend Captain Selwyn. His remarks to-night I have already replied to. His remarks on a former occasion were also like Captain Dawson's, somewhat in a "fly-away style," if he will excuse my saying so. He had written an article in the "Nautical Magazine" some six years ago, and he thought proper to read it. It is all in print, so that if what I say regarding it, is not justified, it will be quite clear that it is not; and those who read the report, can read the gallant Captain's remarks, along with my few words of comment. I should call his system a mode of "dismanning the Navy." It was to scatter men anywhere and everywhere over the world; it was to be nothing but a

system of discharging. The men were to go, and they were to come back, and they were to find purses, and money was to be paid them; and if they came back, well, and if not, never mind. Having discharged all his men but one, a warrant officer with a grievance; he blew him away as he fired his last gun at a target of foolscap and red tape. I should not have noticed this at all, if it had not related to an office with which I am *not* connected. If he will permit me to indulge in a little *esprit de corps*, I may say that I am quite certain that this grievance must have been refused a hearing, *if it was refused a hearing* at Whitehall; and I think it a pity that Naval Officers should come here with such idle tales of grievances; which is only upon a level with Captain Toynbee's reading the opinion of an individual gunner to tell us how to man the Navy. How does he know how to man the Navy? It is trifling with the question; Captain Selwyn will forgive me saying so, for there is no man in this Institution whom I usually listen to with greater respect. But I am now on my defence, and I am sure he would not like to see me with my hands tied, and not able to give shot for shot. I might also say, with regard to this red tape and foolscap, that although my antecedents were gone into in a very strange manner the other night, my antecedents in connection with the Navy were not gone into. There is not, perhaps, any man who can more freely appeal to the Naval Officers in this country, as one who is known to be not much given to red tape, and who likes *foolscap* still less. But the Captain wound up with a very curious remark, making an antithesis between statistics and facts, as if any statistics that were of the slightest value could be inconsistent with facts. It may be true that statistics may be abused, and may be little understood. I am afraid when I go a little further in answering the objections that have been urged to my paper, or in noticing the views that have been advanced against it, I shall be obliged to point out how statistics may be very curiously handled indeed. Still statistics so far are facts. As regards those figures, of course you perceive they out-number mine tenfold. In fact, with regard to those figures of mine, there has been no argument advanced bearing upon them. I come now to the Admiral's figures. You will all recollect how he spoke of the pouring out of the men—the continuous service men and the non-continuous service men—pouring out of the fleet. In that he was quite correct, and what he vaguely, although in strongish language asserted, I will give you figures to confirm. I am still confining all this discussion of figures to the last five years which the Admiral himself has chosen. Previous to that, we were increasing the Navy, and the state of things was very different. Since then, we have been reducing it. I do not want to make out a strong case, and I confine myself to the five years when the Admiral was at Spring Gardens, and knows something about it. Well, Sir, the waste of seamen according to our estimate of waste in Somerset House, from casualties that cannot be controlled, was in those five years, 23,985 men. We call that a waste of ten per cent., but the men paid off to the shore in the same period—I take this from the statement which has been in Admiral Ryder's hands longer than it has been in mine—the waste, as he called it, of men paid off in the same period, was no less than 29,182.\* Then if I am right in calling that 23,985 a waste of ten per cent., and if I were to add another waste equal to 29,182, I should not say the waste was 14 per cent., but upwards of 20 per cent. At all events those two round sums of men who left the Navy in those five years amount to 53,167. I am speaking here merely of seamen—of seamen only, not marines, not boys, not Officers. But, Sir, unless a man were a bottle conjurer, and could go on pouring out and pouring out, it is quite clear that if 53,167 men left the Navy in that time, and we have a Navy still in existence, there must have been men coming in. I shall be very precise in letting you get to the whole bottom of this mystery of “pouring out.” On the first of April, 1861, we had 43,022 of these seamen. We entered (as you will find at page 15 (292) of my paper), during that period from the 1st of April, 1861 up to the 31st March, 1866, a period of five years, 31,207 men, and we grew out of our boys—i.e.—we rated boys as men—to the extent of 12,247. That makes a total of 86,476 men; and when you abate from that, the 53,167 that I have told you of—the 23,900

\* Vide TABLE II, appendix A., p. 356.

who died, deserted, or slipped through our fingers through casualties, and the 29,000 odd, that were discharged to the shore and paid off—when you have allowed for these, you have 33,909 seamen remaining, which was precisely the number we had in Her Majesty's ships on the 31st March, 1866. Now there is no occasion, in my opinion, for any of these complicated tables. I have given you in simple numbers the main result. I will say with regard to those statistics that I got them from precisely the same source as Admiral Ryder. They are not picked out by me individually from the ship's books. I have a valuable staff of gentlemen in one branch of my office, under the superintendence of one of the most able and conscientious public servants that I believe we have under Her Majesty: I speak of Mr. Crawford Harrison; and he and his valuable staff have supplied those figures to us. I think the Admiral should not be so tender about my questioning his tables, nor should he be so pertinacious, as if we had short memories, in telling us that his figures up to a certain extent were checked in our department. There is no doubt about that. But all these figures were not checked, for these are his workings and his deductions, from the simple figures we gave him. I think there was no man here last evening who understood in the slightest degree, what Admiral Ryder meant when he alleged, that we could not get men to enter the Navy to any great extent, while he told us they were always pouring out. I must say that I think there was not a single person present, except the Admiral himself and Mr. Gray (who said that all that Admiral Ryder said, he was prepared to say), who understood how it was possible we could have a Navy existing, and still require £4,000,000 to pay their wages and their victuals, if the men were always pouring out and none were coming in. Well, thus far, I have been speaking of the Navy as a whole; but there was a more specific point that the gallant Admiral brought forward, not for the first time, as regards the entry of seamen. The gallant Admiral called at my office, after it was settled that I was to read a paper on "Manning the Navy" at this Institution.

Admiral RYDER: Pardon me, I was not a party to that, for I did not hear of it till afterwards.

Mr. REDDIE: He came and discussed those statistics, and he told me, in the presence of a gentleman in my office—the gentleman who supplied him with the figures from which he has worked out his tables—he told me of my ignorance in not knowing that he had been unable, as Comptroller of the Coast Guard, to enter men. Now, it was no part of my business to know that the Admiral had orders to enter men and could not do it. An order of that kind comes to my office, and it is noted there, but as I have not to manage the entry of the men, when he told me this, I very good-naturedly replied to him, pointing to those men shown in the table at page 15 (292) of my paper, that if he was not fortunate enough to get men, other Officers could. Well, you will find in the years 1866–7 the seamen voted were 37,300, and the Coast Guard afloat 2,614. If you add these together (and it is not a very hard sum) and divide by 2,614, you will find the Coast Guard forms no large proportion—only a fifteenth part of the whole number afloat! That will explain to you why I did not go into particulars whether a fifteenth part had got men, and whether the whole 31,000 had been got in the other ships. But I may also say that out of the 31,000 that entered at that time, if the Coast Guard had only done its fair share, and entered a fifteenth part of the 31,207, the ships under the gallant Admiral's command (although you are aware he was not in the ships, but at Spring Gardens) should have supplied 2,080 men, out of the whole number. And how many did he supply? He supplied no less than 2,631.

Admiral RYDER: Of pure blue jackets?

Mr. REDDIE: The Admiral, I have told you, entered 2,631 men, or 551 men more than his proper share, in proportion to the rest of Her Majesty's ships, and curiously enough he entered 552 pure blue jackets, and not only 552 of these pure blue jackets altogether, but men direct from merchant ships (first entry men in addition to 709 pure blue jackets, old men-of-war's men. That is my reply, Sir, to the charge of ignorance (now publicly repeated here) as regards the entries of seamen in the Coast Guard ships under the control of the gallant Admiral. I come now to one very important branch of the subject. I might have noticed

some more of the gallant Admiral's remarks, but I will not say anything more about them, because I think I have sufficiently shown by those facts that they are very confused figures that he has put before you. I might mention before I go on to another part of the subject, that the present number of seamen in the fleet is 36,790, just about 500 under the vote, and about 200 under the vote from the 1st of April next.

Admiral RYDER: Pure blue jackets?

Mr. REDDIE: Not pure blue jackets.

Admiral RYDER: Perhaps you will distinguish between the two?

Mr. REDDIE: In this paper I have given the seamen of all classes, and not usually distinguished pure blue jackets; only when I say pure blue jackets, I mean pure blue jackets. In discussing this question, you must remember that the other seamen are in their places on board ship just as necessary as them, and these constant interruptions are really uncalled for. During the course of Mr. Gray's remarks, both on the first evening, when he interrupted Captain Dawson to put us right about figures, and to-night, he stated that the numbers of seamen, or rather the numbers forming the crews of the merchant navy were considerably less than what I had stated.

Mr. GRAY: What I said was, that the crews available in the United Kingdom were under that number. I presume you did not catch the point.

Mr. REDDIE: The first evening I think you said they numbered only 197,643.

Mr. GRAY: I wish to say that what you say is a mistake.

Mr. REDDIE: I hope Mr. Gray has now said what he wants to say; I can then go on. Very well, the 350,000 which I took from the Board of Trade returns included, as I am perfectly aware, men and boys in registered vessels belonging to the United Kingdom, to the Channel Islands, the Isle of Man, and to the British dependencies abroad. I don't know where Mr. Gray got the exact sum 197,643, but it is of very little consequence. I have the Board of Trade returns here. I find he has taken 1865, instead of last year, but that is exclusive of river steamers. I find from the Board of Trade returns that we have 350,000 men in the registered vessels altogether, and 199,736 belong to England alone, excluding Scotland, excluding Ireland, excluding Guernsey and Jersey, where we have actually a training ship, and excluding the Isle of Man. If you take all these in, and I don't know why these are to be severed, there are 255,654 men; and in the British possessions abroad there are 94,369. I think it shows how small a view of a very large question may be taken, when a gentleman from the Board of Trade comes here and wishes to exclude from consideration, as valueless with reference to this subject, the 94,000 who are in these vessels abroad. These crews of vessels are in vessels belonging to a great extent to the North American colonies. In Nova Scotia and Prince Edward's Island alone there are about 20,000, and in Newfoundland and Canada (Quebec and Montreal) and New Brunswick, more than 20,000 besides. That is 40,000 of them in the North American Colonies; and if we had had a brush with America; I should like to know whether men drawn from these vessels to aid the men required in the fleet, would not have been much more valuable than men at home?

The CHAIRMAN: And more available.

Mr. REDDIE: More available, and therefore much more valuable. Moreover they are very excellent seamen, I am told. The commerce of England is dispersed all over the world, and there are 17,000 or 18,000 of those crews of merchant vessels in India, and more if we include Ceylon. There are about 10,000 or 11,000 in Australia. You know the Australians are to have a ship of war sent to them, and quite recognise that they are one with us as regards the defence of the kingdom. Well, Sir, that alone, I think, is worthy of consideration; and, as I have already stated, even if you reduce those men by any vanishing process you may choose—something like this fluxional drain which Admiral Ryder has applied to the fleet.

Admiral RYDER: I did not go into fluxions at all.

Mr. REDDIE: Mr. Gray in like manner reduced the able seamen of the merchant service to 72,000, and he did so apparently with papers in his hand; and yet, with the same paper in my hand, where he gets 72,000 able seamen, I get 13,500 petty officers belonging to the same service, and I get in the adjoining line 18,000 ordinary

seamen, to say nothing of the engineers, boys, stokers, and firemen—and I do not know what we should do in steamers without them. In fact there has been an attempt to minify our mercantile resources, and therefore by comparison, I suppose, to magnify the numbers of the Royal Naval Reserve. But even this 350,000 comes short of the mark: they are only the crews of *registered vessels*, and I believe if you have a proper system of manning the Navy, and a proper system of attracting the seafaring population of this great country, you may be able to draw from your shores other men besides the crews of registered vessels,—men who have got sea-legs, and men who, very shortly, would be made, under the training they would receive on board Her Majesty's ships, first ordinary and then able seamen. That being the case, I think it would be almost a discredit to this country if we could not avail ourselves of those large numbers—this enormous foundation for a reserve which we possess;—and it is no mere opinion of mine to say, that the mercantile marine should form the basis of our reserves, the basis of our safety as a nation. The same opinions have been expressed (I grant you it is some time ago) by the gallant Admiral in a paper published in combination with Mr. Graves, the member for Liverpool, in 1860; and, in fact, throughout the Manning Committee's Blue Book of 1852, and the Manning Commission's Blue Book in 1859, you will find that completely recognised. Now, Sir, I think I have pretty nearly answered all the pertinent objections that have been raised to my paper. I do not recollect any point that requires clearing up that I have not touched on. I had the pleasure, a few weeks ago, of congratulating Mr. Gray—

The CHAIRMAN: Mr. Gray spoke in a jocular way.

Mr. REDDIE: Well, I shall be good tempered with him, and as jocular as you like. I had the pleasure of congratulating him, I say, on his well-deserved promotion, and I should have been quite glad to see him here "bearing his blushing honours thick upon him;" but I must say it is strong language to use to a gentleman who comes here to read a paper in this Institution, to tell him that his propositions are "monstrous;" to tell him that he is throwing out a suggestion of a sinister kind to the Naval Reserve, and a threat to the Naval Reserve; and when a gentleman stands there and says he blushes for me—

Mr. GRAY: I did not use the word "sinister," and I did not blush in that sense.

Mr. REDDIE: You did not make the charge of the sinister "suggestion" and "threat," but you did use the word "blush."

Mr. GRAY: Not in that sense. I blushed for you.

Mr. REDDIE: I can only say he quoted the war cry of an English monarch, but I think, with the sentiment of Shylock, he exclaimed that the Reserve would stick by their bond—that the men had made a good bargain, and would stick to it. I proposed a more equitable thing, which I believe the Naval Reserve men would be most anxious to adopt. I believe they would be ashamed to belong to a reserve on terms which it was proved would prevent their entering the Navy. Their very conduct on the occasion of the "Trent" affair, as volunteers, shows that they are better than their volunteer defenders. No, says Mr. Gray, they shall have their £6 of cash! And I find in to-day's *Times* there seems to be a similar charge against the Board of Trade by a writer under the signature of "Beta," who says that the Board hold to the Act of Parliament with regard to the unpaid wages of seamen, as Mr. Gray would hold to his bond with regard to this retaining fee.

Mr. GRAY: Is that your paper?

Mr. REDDIE: It is in reply to what you stated. In conclusion, Sir, I will say that I brought forward this paper with the view of devising the best means in my power for preventing a great evil which was either imminent or had actually occurred through the institution of the Reserve. Admiral Ryder had stated that it has actually occurred. I never mentioned his name, and I alluded to his statement in the most delicate manner imaginable. I merely alluded to the fact that some people consider that the Reserve is stopping the entry of seamen into the fleet; but, in justice, I also pointed to the entry of 31,000 seamen during that period. But when I did so, I was not at all myself without apprehension, and I stated so in the paper, that although we have got men hitherto, we might not get them so readily



hereafter. And I will tell you what so far justifies this opinion. It will be found in the table (p. 292), which is a very valuable table, short as it is, if it is conned and considered carefully—you will find that while we entered 31,000 during that period, including, in round numbers, 12,000 blue jackets, the number of blue jackets entered as “first entries” from merchant ships last year was only 485, whereas in 1861-62 it was 1,414. And I find in going back in our statistics, that we have generally had about as many first entries of pure blue jackets as of men who had served—old men-of-war’s men—but that has not been the case last year, because then we only had 485 as against 1,136 old men-of-war’s men. You will see that the number is diminishing, whereas of seamen of all classes we are getting the same number. It has been told you also to-night that men who have been rejected by the Reserve as not good enough, have actually gone to the Royal Navy afterwards. Now, Sir, I think that a very serious matter. I cannot understand how any gentleman, with professions of patriotism, or a desire to see the Navy of England what it ought to be, can consider it satisfactory, that the Queen’s ships should have the refuse of the merchant service! I say we should have the pick of the merchant service; and yet not with the view of robbing the merchant service, but of enriching it. What I propose is, that men who are not, at all events, well-qualified, should come to us during peace, when we have time for that sort of work, and be qualified; and, after they are qualified, by serving in a Queen’s ship for three or five years, as they do in France—where they manage things better than we do here—then we shall turn them over to the merchant service, giving them (and I think very properly), if they will engage to come back when we want them, a certain “retainer,” as represented by their qualifications, say as seamen-gunners and good-conduct men. They will take those qualifications with them as standing benefits into the merchant service, and keep them, of course, and earn fresh laurels when they come back to us. I certainly see nothing in this proposition to excite the ire of any class of men, whether they belong to the commercial marine or the Royal Navy. I am quite sure of this—and I wrote it in 1860, before the Naval Reserve was in operation—that the merchant ships cannot wish to be manned till the Navy secures them upon the sea. Therefore, our having a Naval Reserve upon this principle, both gives you a larger number of well-trained seamen, for the merchant service, and it gives you security upon the ocean. At this late hour I must say no more. I must thank you for the kind way in which you have heard me. There has been a little smart firing, but I think, when the paper and the discussion come to be read, that I have nothing to be ashamed of.

The CHAIRMAN: I will not take up your time in making any further remarks, but I will make only one remark upon an observation of Mr. Gray’s, that I do not think when he was reducing the number of seamen from 350,000 to 70,000, he saw the force of. Now, if it be really so, that instead of having 350,000 seamen to draw our contingent reserve from, we have only 70,000, it becomes a very serious matter, and a double reason why we should have a reserve to provide for those contingent forces, and not one which will provide only in case of a declaration of war. I am sure you will allow me to thank Mr. Reddie for his paper.

[Mr. Reddie.]

APPENDIX A., TABLE II., referred to on page 351.

Year.	Seamen Rated from Boys trained in Royal Navy.		"Waste" of Seamen from Deaths and other Casualties.		Seamen discharged on paying off Ships.	
	Seamen of all classes.	Pure Blue Jackets.	Seamen of all classes.	Pure Blue Jackets.	Seamen of all classes.	Pure Blue Jackets.
In 1861-62.....	2,982	2,864	6,865	5,097	7,017	5,221
In 1862-63.....	3,094	2,980	5,089	3,560	7,554	5,286
In 1863-64.....	2,635	2,517	4,385	3,166	4,415	3,188
In 1864-65.....	2,040	1,899	3,831	2,124	5,777	3,204
In 1865-66.....	1,496	1,470	3,815	2,007	4,419	2,362
Totals .....	12,247	11,730	23,985	15,954	29,182	19,261

NOTE.—In the above Table officers are excluded. In 1865-66 the average number of pure blue jackets borne was 21,097, the "waste" upon which number (2,007), it will, therefore, be observed, was *under* 10 per cent. If the men paid off (2,362) be added, the loss would be obviously more than 20 per cent. In the same year the "waste" upon 7,007 boys borne was 430, or about 7 per cent. only.



[Mr. Reddie.]

STATEMENT of the Numbers of Seamen (includ

Year.	VOTED.				Serving in H.M. Navy.	Crews of Merchant Vessels.	Year.
	Seamen.	Boys.	Marines.	Total.			
War with France, June, 1756, to Feb., 1763. Jan., 1762, to Feb., 1763.	1756	Not known.	None.	Not known.	50,000	52,809	<div>(Not known)</div> <div>           1793 1794 1795 1796 1797 1798 1799 1800 1801 1802 1803 1804 1805 1806 1807 1808 1809 1810 1811 1812 1813 1814 1815 1816 1817 1818 1819 1820 1821 1822 1823 1824         </div>
	1757	"	"	"	55,000	63,259	
	1758	"	"	"	60,000	70,694	
	1759	"	"	"	70,000	81,464	
	1760	"	"	"	70,000	86,626	
	1761	"	"	"	70,000	80,954	
	1762	"	"	"	70,000	84,797	
	1763	"	"	"	30,000	38,350	
	1764	"	"	"	16,000	20,603	
	1765	"	"	"	16,000	19,226	
	1766	"	"	"	16,000	16,817	
	1767	"	"	"	16,000	15,755	
	1768	"	"	"	16,000	15,511	
	1769	"	"	"	16,000	16,730	
	1770	"	"	"	16,000	19,768	
	1771	"	"	"	40,000	31,310	
	1772	"	"	"	25,000	26,299	
	1773	"	"	"	20,000	21,688	
With France, Feb., 1778, to Jan., 1783. With America, July, 1774, to Nov., 1782. With Spain, April, 1780, to Jan., 1783. With Holland, Dec., 1780, to Sep., 1783.	1774	"	"	"	20,000	19,928	
	1775	13,226	"	4,774	18,000	19,846	
	1776	21,335	"	6,665	28,000	31,034	
	1777	34,871	"	10,129	45,000	52,836	
	1778	48,171	"	11,829	60,000	72,258	
	1779	52,611	"	17,389	70,000	87,767	
	1780	66,221	"	18,779	85,000	97,898	
	1781	60,683	"	20,317	90,000	99,362	
	1782	78,695	"	21,305	100,000	105,443	
	1783	84,709	"	25,291	110,000	65,677	
	1784	21,505	"	4,495	26,000	28,878	
	1785	14,380	"	3,620	18,000	22,183	
	1786	14,380	"	3,620	18,000	17,259	
	1787	14,140	"	3,860	18,000	19,444	
	1788	14,330	"	3,670	18,000	19,740	
	1789	16,140	"	3,860	20,000	20,396	
	1790	16,135	"	3,865	20,000	39,526	
	1791	19,200	"	4,800	24,000	34,097	
	1792	11,575	"	4,425	16,000	17,361	
						59,004	<div>Vessels belonging to Eng- land and Scotland only.</div>
						65,880	
						71,372	
						74,835	
						81,745	
						107,925	
						108,962	
						112,556	
						117,044	
						118,286	

\* N  
† These Numbers, c

en (including Officers), Boys, and Marines, voted for, and actually serving in, the Royal Navy, in

Year.	VOTED.				Serving in H.M. Navy.	Crews of Merchant Vessels.	Year.
	Seamen.	Boys.	Marines.	Total.			
1793	40,000	None.	5,000	45,000	59,042	118,952	1825
1794	72,885	"	12,115	85,000	83,891	119,629	1826
1795	85,000	"	15,000	100,000	99,608	116,467	1827
1796	95,000	"	15,000	110,000	112,382	124,394	1828
1797	100,000	"	20,000	120,000	120,046	124,394	1829
1798	100,000	"	20,000	120,000	119,592	129,546	1830
1799	100,000	"	20,000	120,000	120,409	135,237	
	97,304	"	22,696	120,000			
1800	for 2 lunar months 87,304	"	for 2 lunar months 22,696	for 2 lunar months 110,000	123,527	138,721	1831
	for 11 lunar months 97,304	"	for 11 lunar months 22,696	for 11 lunar months 120,000			
1801	for 3 lunar months 105,000	"	for 3 lunar months 30,000	for 3 lunar months 135,000	131,959	149,766	1832-33 1833-34 1834-35 1835-36 1836-37 1837-38 1838-39 1839-40
	for 10 lunar months 100,000	"	for 10 lunar months 30,000	for 10 lunar months 130,000			
1802	for 5 lunar months 70,000	"	for 5 lunar months 18,000	for 5 lunar months 88,000	77,765	154,530	
	for 1 lunar month 56,000	"	for 1 lunar month 14,000	for 1 lunar month 70,000			
	for 7 lunar months 38,000	"	for 7 lunar months 12,000	for 7 lunar months 50,000			
	8,000	"	2,000	10,000			
	in addition	"	in addition	in addition			
1803	for 11 lunar months 32,000	"	for 11 lunar months 8,000	for 11 lunar months 40,000	67,148	153,828	1840-41
	in addition	"	in addition	in addition			
	for 7 lunar months	"	for 7 lunar months	for 7 lunar months			
1804	78,000	"	22,000	100,000	99,372	153,774	1841-42
1805	90,000	"	30,000	120,000	114,012	157,712	1842-43
1806	90,000	"	30,000	120,000	122,860	156,031	1843-44
1807	88,600	"	31,400	120,000			1844-45
	10,000	"	—	10,000	130,917	157,875	1845-46 1846-47
	in addition	"	in addition	in addition			
1808	98,600	"	31,400	130,000	139,605	157,105	
1809	98,600	"	31,400	130,000	144,387	160,598	
1810	113,600	"	31,400	145,000	146,312	164,195	1847-48
1811	113,600	"	31,400	145,000	144,762	162,547	
1812	113,600	"	31,400	145,000	144,844	165,030	
1813	108,600	"	31,400	140,000	147,047	165,537	
	108,600	"	31,400	140,000			
1814	for 7 lunar months (Not known)	"	for 7 lunar months (Not known)	for 7 lunar months 90,000	126,414	172,786	1848-49
	for 6 lunar months	"	for 6 lunar months	for 6 lunar months			
	55,000	"	15,000	70,000			1849-50 1850-51 1851-52
1815	(Not known)	"	(Not known)	20,000	78,891	177,309	
	for 10 lunar months	"	for 10 lunar months	for 10 lunar months			
1816	24,000	"	9,000	33,000	35,196	178,820	1852-53
1817	13,000	"	6,000	19,000	22,944	171,013	
1818	14,000	"	6,000	20,000	23,026	173,609	1853-54
1819	14,000	"	6,000	20,000	23,230	174,318	1854-55
1820	15,000	"	8,000	23,000	23,985	174,514	1855-56
1821	14,000	"	8,000	22,000	24,937	169,179	
1822	13,000	"	8,000	21,000	23,806	166,333	
1823	16,300	"	8,700	25,000	26,314	165,474	1856-57
1824	20,000	"	9,000	29,000	30,502	168,637	

War with China.

With Russia.

\* NOTE.—The above Numbers Voted and Borne for the Coast Guard Afloat and on Shore relate to persons belonging to the Royal Navy, down to 1857 inclusive, are taken from the Manning Commission's Blue Book (1859), pp. 362, 363; and for

APPENDIX A.—TABLE 1.

yal Navy, in each year, from 1756 to 1867; also of the Crews of *Registered Vessels*, belonging to the I

Year.	VOTED.				Serving in H.M. Navy.	Crews of Merchant Vessels.	Year.
	Scamen.	Boys.	Marines.	Total.			
1825	20,000	None.	9,000	29,000	31,456	166,183	1857-58 { Fleet ..... Coast { Aloft... Grd.* { On Shore
1826	21,000	"	9,000	30,000	32,519	167,636	
1827	21,000	"	9,000	30,000	33,106	151,415	
1828	21,000	"	9,000	30,000	31,818	155,576	
1829	21,000	"	9,000	30,000	32,458	154,808	
1830	20,000	"	9,000	29,000	31,160	154,812	
	22,000	"	10,000	32,000			
1831	to 31st March, 1832.		to 31st March, 1832.	to 31st March, 1832.	29,336	158,122	1858-59 { Fleet ..... Coast { Aloft... Guard { On Shore
	(Financial year changed to period between 1st April and 31st March following.)						
1832-33	18,000	"	9,000	27,000	27,328	161,631	1859-60 { Fleet ..... Coast { Aloft... Guard { On Shore
1833-34	18,000	"	9,000	27,000	27,701	161,000	
1834-35	17,500	1,000	9,000	27,500	28,066	168,061	
1835-36	15,500	2,000	9,000	26,500	26,041	171,020	
1836-37	22,700	2,000	9,000	33,700	30,195	170,637	
1837-38	23,165	2,000	9,000	34,165	31,289	173,506	
1838-39	23,165	2,000	9,000	34,165	32,028	178,583	1860-61 { Fleet ..... Coast { Aloft... Guard { On Shore
1839-40	23,165	2,000	9,000	34,165	34,857	191,283	
	24,165	2,000	9,000	35,165			
	2,000	—	—	2,000			
	in addition for 10 calendar months	—	—	in addition for 10 calendar months	37,665	201,340	
1840-41	2,500	—	—	2,500			
	in addition for 3 calendar months			in addition for 3 calendar months			1861-62 { Fleet ..... Coast { Aloft... Guard { On Shore
1841-42	30,500	2,000	10,500	43,000	41,389	210,198	1862-63 { Fleet ..... Coast { Aloft... Guard { On Shore
1842-43	30,500	2,000	10,500	43,000	43,105	214,609	
1843-44	26,500	2,000	10,500	39,000	40,220	213,977	
1844-45	23,500	2,000	10,500	36,000	38,343	216,350	
1845-46	27,500	2,000	10,500	40,000	40,084	221,900	
1846-47	27,500	2,000	10,500	40,000	43,314	229,276	
			11,000	40,500			1863-64 { Fleet ..... Coast { Aloft... Guard { On Shore
			and 1,000	and 1,000	44,969	232,890	
1847-48	27,500	2,000	in addition for 6 months	in addition for 6 months			
			12,500	42,000			
			and 1,000	and 1,000	43,978	236,069	
1848-49	27,500	2,000	in addition for 6 months	in addition for 6 months			
			12,000	40,000	39,535	237,971	1864-65 { Fleet ..... Coast { Aloft... Guard { On Shore
1849-50	26,000	2,000	11,000	39,000	39,093	239,283	
1850-51	26,000	2,000	11,000	39,000	38,957	240,928	
1851-52	26,000	2,000	11,000	39,000			
	5,000	—	1,500	6,500	40,451	243,512	
1852-53	in addition for 4 months		in addition for 4 months	in addition for 4 months			
1853-54	31,000	2,000	12,500	45,500	45,885	253,806	1865-66 { Fleet ..... Coast { Aloft... Guard { On Shore
1854-55	46,000	2,000	15,500	63,500	61,457	266,491	
1855-56	44,000	10,000	16,000	70,000	67,791	261,194	
	50,000	10,000	16,000	76,000			
1856-57	for 3 months	for 3 months	for 3 months	for 3 months	60,659	267,573	
	33,333	6,667	16,000	56,000			
	for 9 months	for 9 months	for 9 months	for 9 months			

With Russia.

War with China.

persons belonging to the Navy, and Borne on the Books of the District Guard Ships; and are exclusive of the "Civilians" on sh  
363; and for the following years from Board of Trade Returns, in which, however, the Numbers for 1857 are given as 287,353,



to the British Mercantile Marine, in the same periods.

	VOTED.					Serving in H. M. Navy.	Crews of Merchant Vessels.
	Seamen.	Boys.	Marines.	Total.	REMARKS.		
..... {	27,530	5,470	15,000	48,000		50,419	
..... {	2,000 <sup>a</sup>	—	—	2,000 <sup>a</sup>		1,852	
{ Afloat...	2,080	420	—	2,500	<sup>a</sup> Voted in addition	2,020	3,872
{ On Shore	3,200	—	—	3,200	for 9 months.		
..... {	34,810	5,890	15,000	55,700	55,200 mean vote	54,291	284,135†
..... {	30,990	6,100	15,000	52,000	for year.	52,450	
{ Afloat...	3,025	475	—	3,500		3,300	6,610
{ On Shore	3,880	—	—	3,880		3,310	
..... {	37,805	6,575	15,000	59,380		59,060	288,345
..... {	33,400	6,600	15,000	55,000		66,500	
{ Afloat...	6,700 <sup>b</sup>	1,300 <sup>b</sup>	2,000 <sup>b</sup>	10,000 <sup>b</sup>	<sup>b</sup> Voted in addition	3,175	6,595
{ On Shore	3,566	434	—	4,000	for 11 months.	3,420	
..... {	3,400	—	—	3,400			
..... {	47,066	8,334	17,000	72,400	71,566 mean vote	73,101	291,341
..... {	49,000	9,000 <sup>a</sup>	18,000	76,000	for year.	72,276	
{ Afloat...	3,603	497	—	4,100	<sup>c</sup> Including 2,000	3,284	6,742
{ On Shore	4,000	—	—	4,000	for training.	3,458	
..... {	56,603	9,497	18,000	84,100		79,018	294,460
..... {	42,900	8,100 <sup>d</sup>	18,000	69,000	<sup>d</sup> Including 2,000	71,297	
{ Afloat...	3,546	454	—	4,000	for training.	3,224	6,817
{ On Shore	4,000	—	—	4,000		3,593	
..... {	50,446	8,554	18,000	77,000		78,114	299,861
..... {	40,000	9,000 <sup>e</sup>	18,000	67,000	<sup>e</sup> Including 2,500	66,952	
{ Afloat...	3,517	453	—	4,000	for training.	3,483	7,364
{ On Shore	3,850	—	—	3,850		3,881	
..... {	47,397	9,453	18,000	74,850		74,316	304,171
..... {	39,000	9,000 <sup>f</sup>	18,000	66,000	<sup>f</sup> Including 2,500	63,225	
{ Afloat...	4,034	466	—	4,500	for training.	3,571	7,663
{ On Shore	4,500	—	—	4,500		4,092	
..... {	47,534	9,466	18,000	75,000		70,888	326,366
..... {	38,500	7,000 <sup>g</sup>	18,000	63,500	<sup>g</sup> Including 2,500	62,403	
{ Afloat...	3,114	386	—	3,500	for training.	3,409	7,628
{ On Shore	4,000	—	—	4,000		4,219	
..... {	45,614	7,386	18,000	71,000		70,031	341,499
..... {	38,000	7,000 <sup>h</sup>	17,000	62,000	<sup>h</sup> Including 3,000	60,846	
{ Afloat...	2,680	320	—	3,000	for training.	2,817	7,044
{ On Shore	4,000	—	—	4,000		4,227	
..... {	44,680	7,320	17,000	69,000		67,890	350,023
..... {	37,200	7,000 <sup>i</sup>	16,400	60,700	<sup>i</sup> Including 2,750		
{ Afloat...	2,614	336	—	2,950	for training.	(Not yet known)	(Not yet known)
{ On Shore	4,200	—	—	4,200			
..... {	44,114	7,336	16,400	67,850			

ians" on shore.

us 287,353, and not 284,135.



[Admiral Ryder.]

## APPENDIX B. TABLE I.

*Bond Fide Seamen in the Navy (afloat), showing the Monthly Decrease and Increase.*

Dates.	Continuous Service.			Non-Continuous Service.		
	Number.	Decrease.	Increase.	Number.	Decrease.	Increase.
1864 {	1 March .....	19,939	..	3,868	..	
	April .....	19,881	- 58	4,070	..	+ 203
	May .....	19,914	..	4,036	- 34	
	June .....	19,744	-170	4,199	..	+ 163
	July .....	19,843	..	3,680	-519	
	August .....	19,606	-237	3,829	..	+ 149
	September .....	19,502	-104	3,648	-181	
	October .....	19,479	- 23	3,501	-147	
	November .....	19,330	-149	3,447	- 54	
	December .....	19,071	-259	3,524	..	+ 77
	January .....	19,297	..	3,314	-210	
	February .....	19,223	- 74	3,348	..	+ 34
1865 {	March .....	18,920	-303	3,250	- 98	
	April .....	19,106	..	3,252	..	+ 2
	May .....	18,937	-169	3,220	- 30	
	June .....	18,923	- 14	3,247	..	+ 27
	July .....	18,767	-156	3,084	-163	
	August .....	18,762	- 5	3,115	..	+ 31
	September .....	18,610	-152	3,107	- 8	
	October .....	18,375	-235	2,999	-108	
	November .....	18,270	-105	3,019	..	+ 20
	December .....	18,240	- 30	3,128	..	+109
	January .....	18,197	- 43	2,947	-181	
	February .....	18,327	..	2,950	..	+ 3
1866 {	March .....	18,320	- 7	2,881	- 69	
	April .....	18,238	- 82	2,843	- 38	
	May .....	18,379	..	2,833	- 10	
	June .....	18,266	-113	2,730	-103	
	July .....	18,158	-108	2,678	- 52	
	August .....	18,146	- 12	2,654	- 22	
	September .....	18,158	..	2,597	- 57	
	October .....	18,105	- 53	2,559	- 38	
	November .....					
Total .....		2,661	827		2,112	817
		827			817	
		1,834			1,295	

The diminution in the number of *bond fide* seamen in the Royal Navy in 32 months, viz., from March, 1864, to October, 1866 .....

3,139

Notwithstanding all entries and re-entries of seamen, and the addition of about 4,000 young seamen rated from boys.

As every boy who is rated a seaman fills up a vacancy, we must add the number of boys so rated to the above diminution to obtain the waste of seamen during the interval .....

4,000

Waste of *bond fide* seamen in the 32 months .....

7,139

or 12·7 per cent. per annum on 21,000.

[Admiral Ryder.]

## APPENDIX B. TABLE II.

*The Annual Waste of bond fide Seamen in the Royal Navy from all causes since 1861.*

YEARS.	Seamen, including Officers, Artificers, Domestics, &c.		Bond fide seamen afloat on 1st April in each year.	Uncompensated waste, notwithstanding the entries and re-entries of seamen from the shore, and the men rated from boys.	This Uncompensated Waste was as follows:				
	Voted.	Borne.			Bond fide seamen who left from all causes.	Entries and re-entries of bond fide seamen.	Waste of bond fide seamen.	Boys rated seamen.	Uncompensated waste, as given in col. 4.
	1.	2.	3.	4.	5.	6.	7.	8.	9.
1 April, 1861	Afloat 46,446 Coast Guard on shore } 4,000	48,960	32,792	..	..	..	..	..	..
				4,107	10,318	- 3,347	= 6,971	- 2,864	= 4,107
1 April, 1862	Afloat 43,547 Coast Guard on shore } 3,850	45,109	28,685	..	..	..	..	..	..
				3,286	8,846	- 2,580	= 6,266	- 2,980	= 3,286
1 April, 1863	Afloat 43,034 Coast Guard on shore } 4,500	42,008	25,399	..	..	..	..	..	..
				1,431	6,354	- 2,406	= 3,948	- 2,517	= 1,431
1 April, 1864	Afloat 41,614 Coast Guard on shore } 4,000	42,413	23,968	..	..	..	..	..	..
				1,593	5,328	- 1,836	= 3,492	- 1,899	= 1,593
1 April, 1865	Afloat 40,680 Coast Guard on shore } 4,000	40,731	22,375	..	..	..	..	..	..
				1,278	4,369	- 1,621	= 2,748	- 1,470	= 1,278
1 April, 1866	Afloat 39,914 Coast Guard on shore } 4,200	38,809	21,097	..	..	..	..	..	..
1 April, 1867	Afloat Coast Guard on shore }								
				11,695	35,215	11,790	23,425	11,730	11,695



# ROYAL NAVAL RESERVE.

SCALE, showing the Progressive Increase in the Reserve since the formation of the Force, in January, 1860.

## EXPLANATION.

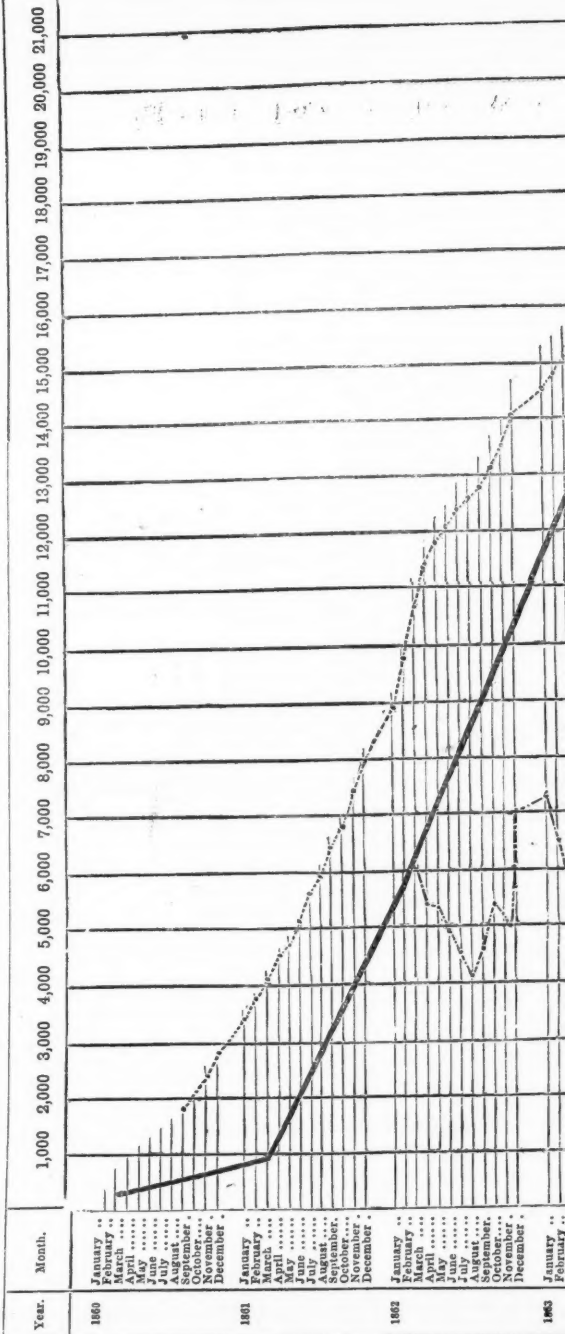
Extremes of Horizontal Lines show the Number of Men enrolled.

The Dotted Curved Line, thus

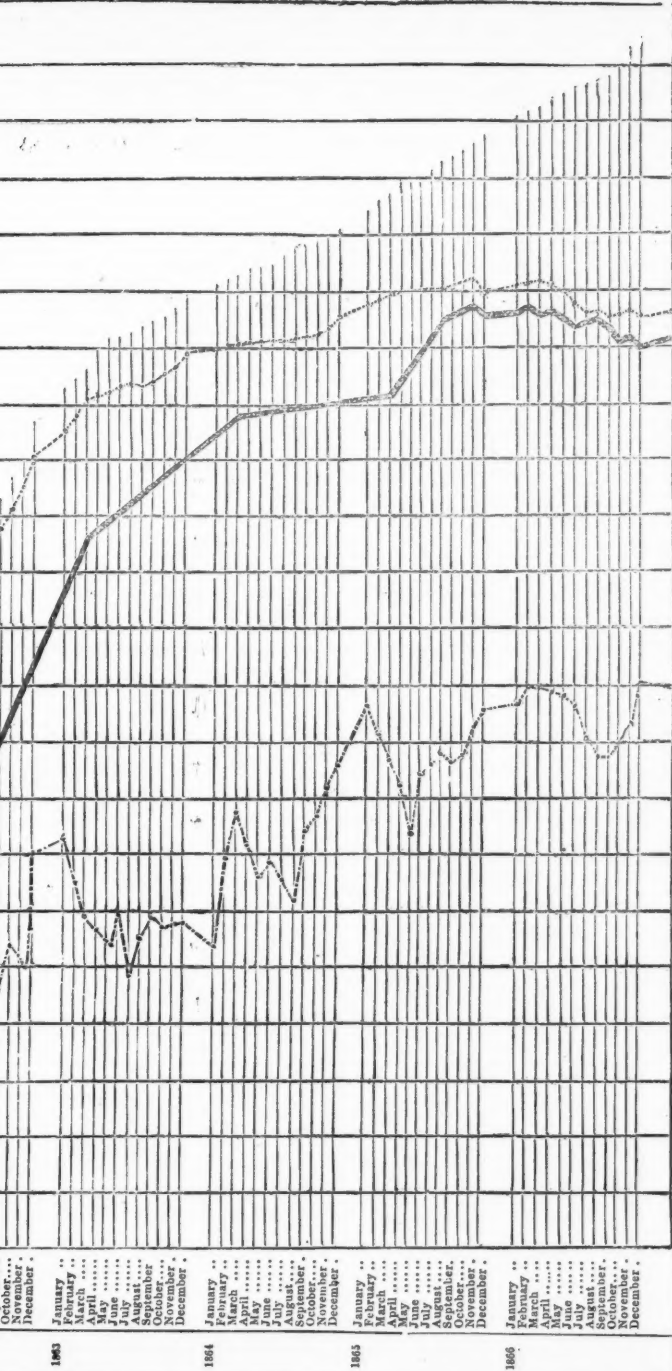
The Thick Curved Line, thus

The Zigzag Line, thus

shows the actual Strength of the Force, after deducting Deaths, Discharges, Desertions, &c.  
shows the Number of Men who have taken any Drill, and been paid any Retainers and Drill Pay.  
shows the Number of Men available in Great Britain at any one time. The average Number of Men who arrive in England from abroad is 1,000 a-month.







NOTE.—12,000 Men had, on 31st Dec., 1866, completed the whole of their Drill in Great Gun, Rifle, and Cutlass for that year; and 4,157 were Absent with Leave on short voyages, and had not therefore completed the whole of their Drill, but will in all probability do so in the course of a few months.

1864	February ..	277								
	March .....	144								
	April .....	114								
	May .....	66								
	June .....	12								
	July .....	12								
	August .....	68								
	September ..	60								
	October ..	126								
	November ..	13								
	December ..	139								
1865	January ..	166								
	February ..	150								
	March .....	139								
	April .....	192								
	May .....	57								
	June .....	79								
	July .....	88								
	August .....	80								
	September ..	169								
	October ..	90								
	November ..	240								
	December ..	184								
1866	January ..	184								
	February ..	115								
	March .....	144								
	April .....	69								
	May .....	72								
	June .....	84								
	July .....	84								
	August .....	75								
	September ..	115								
	October ..	144								
	November ..	121								
	December ..	205								
1867	January ..	205								
	February ..	148								
	March .....	115								
	April .....	168								
	May .....	140								
	June .....	85								
	July .....	78								
	August .....	137								
	September ..	186								
	October ..	132								
	November ..	194								
	December ..	202								
1867	January ..	252								
	February ..	100								
	March .....	200								
	April .....	300								
	May .....	400								
	June .....	500								
	July .....	600								
	August .....	700								
	September ..	800								
	October ..	900								
	November ..	1000								
	December ..									

a These entries took place immediately after the arrival in England of the news of the outrage on board the "Trent."

## ROYAL NAVAL RESERVE FORCE.

[Diagram 2.]

SCALE, showing the number of Men enrolled in the Force in each Month since the formation of the Royal Naval Reserve, in January, 1860.

Year.	Month.	Enrolled each Month.	100	200	300	400	500	600	700	800	900	1000
1860	January ..	339										
	February ..	333										
	March ....	297										
	April ....	247										
	May .....	186										
	June .....	186										
	July .....	290										
	August ..	174										
	September ..	253										
	October ..	278										
	November ..	549										
	December..	588										
1861	January ..	338										
	February ..	338										
	March ....	334										
	April .....	385										
	May .....	466										
	June .....	466										
	July .....	518										
	August ....	343										
	September ..	605										
	October ..	571										
	November ..	58										
	December..	847										
1862	January ..	938										
	February ..	1,110										
	March ....	1,110										
	April .....	1,110										
	May .....	429										
	June .....	391										
	July .....	329										
	August ....	260										
	September ..	210										
	October ..	323										
	November ..	477										
	December..	430										
1863	January ..	538										
	February ..	324										
	March ....	277										
	April .....	1,111										
	May .....	66										
	June .....	112										
	July .....	72										
	August ....	60										
	September ..	60										
	October ..	60										
	November ..	60										
	December..	60										

Increase to  
Force  
in  
1863  
3,526

}a



## [Admiral Ryder.] APPENDIX B. TABLE III.

*The Waste of bonâ fide Seamen in each year shown in percentage of the number of bonâ fide Seamen on Ship's Books on the 1st April of each year.*

Years.	1. Loss from all causes.	2. First Entries and Re- entries.	3. The Waste, being the difference of the last two columns.	4. Boys rated Seamen.	5. The Uncom- pensated Waste being the dif- ference of the last two columns.
1861-62	31·4	10·2	21·2	8·7	12·5
1862-63	30·8	9·	21·8	10·4	11·4
1863-64	25·	9·5	15·5	9·9	5·6
1864-65	22·2	7·6	14·6	7·9	6·7
1865-66	19·5	7·2	12·3	6·5	5·8

NOTE.—In estimating what the waste of *bonâ fide* seamen is likely to be three years hence, as a guide to the number of boys to be entered this year, we shall find that there are fourteen outlets.

## I. Casualty Waste.

This is the only waste recognized as such by Mr. Reddie. It amounted to about 9·5 per cent. in 1865-66, and is believed to include:—

- |  |   |
|--|---|
| 1. Invaliding.                                   | 8. Discharged on pension.   |
| 2. Death.  | 9. Discharged per order.  |
| 3. Discharged to shore (previous to paying off). | 10. Discharged on request.  |
| 4. Desertion.                                    | 11. Discharged for incompetency.  |
| 5. Discharged with disgrace.                     | 12. To the shore on continuous-service engagement ceasing (previous to paying off). |
| 6. Discharged as objectionable.                  |   |
| 7. Discharged by purchase.                       |   |

## II. Paying off Waste.

This takes place among the non-continuous service men, and amounted apparently to about 3 per cent. in 1865-66.

## III. Waste arising from men sent to Coast Guard ashore.

Owing to the Coast Guard ashore having nearly reached their normal state as to age, we must anticipate that a much larger number of volunteers from the fleet will be required annually, viz., 1·8 per cent., instead of under 1 per cent.

Probable waste for the future in the *bonâ fide*

Seamen serving afloat ..... = 9·5 + 3· + 1·8 = 14·3

[Admiral Ryder.]

## APPENDIX B. TABLE IV.

*Showing the Annual Supply of Boys each year to replace the Waste of Seamen.*

Years.	Boys Voted.		Boys actually in the Service on 1st April, each year.		Boys entered in Training Ships each year.	Boys left Training Ships for Sea-going Ships, each year.	First Class Boys who were entered in H.M.S. "Excellent," and the Royal Navy generally, independent of the Training Ships.	Total Supply of Boys to Sea-going Ships, being the Sum of Cols. 6 and 7.	Probable future Supply of Young Seamen from Boys rated Men, allowing them two years as 1st Class Boys previous to being rated, and allowing a waste of 7 per cent. per annum after leaving the Training Ship.
	Afloat.	In Training Ships.	Afloat.	In Training Ships.					
1 April, 1861.	1. 6,554	2. 2,000	3. 9,938	4. Boys for training ships not distinguished.	5.	6.	7. 968	8.	9.
1 April, 1862.	6,953	2,500	7,421	1,871	2,210	1,520	412	1,932	
1 April, 1863.	6,966	2,500	5,813	2,210	2,351	1,611	260	1,871	
1 April, 1864.	4,886	2,500	4,862	2,703	1,870	1,847	175	2,022	1,644
1 April, 1865.	4,320	3,000	4,483	2,242	2,116	1,596	86	1,681	1,618
1 April, 1866.	4,586	2,750	4,739	2,404	—	—	—	—	1,748
1 April, 1867.	—	—	—	—	—	—	—	—	1,447
1 April, 1868.	—	—	—	—	—	—	—	—	—
Total..	..	..	..	..	8,647	6,574		7,506	6,467
					For four years.				



[Admiral Ryder.]

## APPENDIX B. TABLE V.

*Supply of Boys.*

Average Number of Boys on Ship's Books each year.		Number of Boys entered each year.	Number of Boys Rated Men each year.	Remarks.
Year.	Number.			
1858-59	6,006	1,935	1,865	If we carefully study this Table, we shall ascertain that about 29 per cent. of every 100 boys that are entered in the training ships are wasted before they are rated men in sea-going ships. So that in order to rate 1,000 young seamen from boys in the course of the year, 1,408 boys must have been entered in some previous year; and as about 3,000 young seamen are required every year, 4,224 boys should be entered in training ships every year.
1859-60	8,388	5,244	1,643	
1860-61	9,418	3,607	1,747	
1861-62	9,523	3,246	2,864	
1862-63	8,519	2,617	2,980	
1863-64	7,479	2,673	2,517	
1864-65	6,880	1,790	1,899	
1865-66	6,883	2,279	1,470	
1866-67				
1867-68				

## LECTURE.

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Friday, May 31, 1867.

LIEUT.-GENERAL SIR GEORGE ST. P. LAWRENCE, K.C.S.I., C.B.,  
in the Chair.

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### THE COMMUNICATIONS, COMMERCIAL AND MILITARY, BETWEEN THE STEPPES OF CENTRAL ASIA AND HINDUSTAN.

By Colonel R. A. SHAFTO ADAIR, F.R.S., A.D.C. to the Queen.

The CHAIRMAN: I have the pleasure to introduce to you Colonel Shafto Adair, who has kindly consented to lecture on the routes, military and commercial, between British India and Central Asia, a subject which, although of the greatest importance to us, is but little understood in England.

Colonel ADAIR: It probably has very seldom happened that a subject which has been submitted for discussion in this theatre has occupied prominently, at the same time, the attention of the public; and when we are dealing with a matter which, as you, Sir, have well observed, is of the utmost importance in the imperial relations which connect India with this country, it is perhaps fortunate that it is so, for looking at the weight which the opinions of the members of this Institution carry with them, not only in this country, but throughout the civilized world, incorrect impressions might be produced of the favour or disfavour with which a particular policy is received by the public, if it had been the subject of deliberate discussion before the members of the Institution. Therefore, had I been at all aware—could I have supposed—that the subject of to-day's lecture would have so suddenly assumed the prominence to which it is entitled in the public press, and in the public mind, I should have deliberated whether I had not better request from the Council permission to withdraw or postpone this lecture, or to substitute some other subject. But standing here with the consciousness that I have not adopted a foregone conclusion, that I am not prepared to recommend any policy which will be affected by what is in the public press, I trust I shall not only myself be acquitted of any idea of improperly applying the weight that attaches to discussions from this desk, to the subject on which I shall address

you, but that the Council also will not be supposed to express an opinion on points which are not already prepared for decision.

The public mind has indeed been deeply stirred on this subject, and it is somewhat remarkable that on the very same day that the letter from Calcutta which has given rise to so much comment was published in this country, the approbation of one of our highest scientific societies—the Royal Geographical—was given to an Officer who had been mainly concerned in scientific proceedings having reference to this very subject. I find that in the proceedings of the Royal Geographical Society, the “Founder’s medal was conferred on Admiral Alexis “Boutakoff, of the Russian Imperial Navy, for being the first to “launch and navigate ships in the Sea of Aral, an achievement which “led to the establishment of steam navigation on that sea, and up the “great river Jaxartes, into the heart of Turkestan; also for his subsequent successful survey of the chief mouths of the Oxus, in the “Khanat of Khiva. In having proved that the Jaxartes of the “ancients (the Syr-Daria of the Asiatics), which flows into the “northern end of the Sea of Aral, is a stream which steam vessels “can navigate for upwards of 500 miles above its mouth, a safe line “of communication between Europe and China, through Western “Turkestan, was first laid open to Europe. While Britain, therefore, “holds her own high road to India and China by the ocean, Russia, “after trading overland for centuries with Western China under great “difficulties, owing to the intervention of barbarous and hostile tribes, “has opened out for herself a course along which, by the interposition “of small protective forts, she will have a safe trade through Turkestan “with the Celestial Empire.”

So much relates to the services rendered to science by this distinguished Naval Officer; and you will agree that the recognition has been well deserved.

With regard to the inferences that are to be drawn therefrom, my impression is, that it will not be difficult to find reasons for supposing that that extension of geographical science which has been viewed with apprehension, will, in the end, tend not only to the advantage of the countries conterminous with the Syr-Daria, but also to that of Asia at large, and of the two great empires by whose fiat the destinies of Asia, humanly speaking, must be regulated.

Yet there are other impressions abroad in India amongst our fellow subjects, in the localities where they are best able to form an opinion of the results likely to be obtained by that development of Russian scientific power. It appears from the *Calcutta Gazette*, in a letter of the 27th April, that general alarm and uneasiness extend through India with regard to these advances of which I am speaking, that astonishment is expressed at the inactivity of our policy, which those on the spot are perfectly capable of estimating, and of expressing an opinion upon. But this also appears, which gives better hope for the future of our Indian Government than almost any one fact—that whatever is matter of importance in the arrangement of our policy, is now the free subject of discussion amongst the natives and through the press. Officers who have been in India know well how difficult it

was to ascertain the truth of Bazaar reports. They know how impossible it was to penetrate the secrets of the native Courts, and the intrigues of native diplomacy. Give India a free expression through her press of what her people think, and the rumours of the Bazaar will be converted into truths, and the secrets of diplomacy will no longer exist to entangle us in our relations with the native Governments.

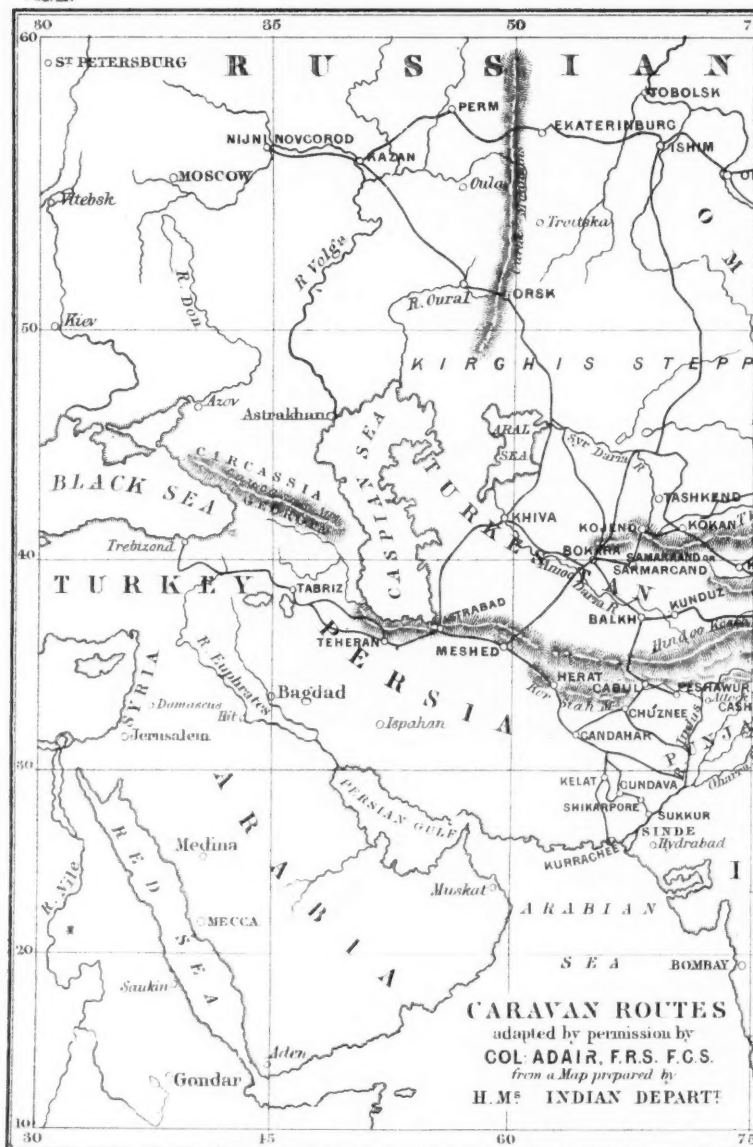
I estimate, then, as of great importance these remarks coming from India. I will not at this point enter upon the policy that I should be prepared to say might result in accordance with the suggestions, but I will merely call your attention to the fact that these reports are in existence; that the public mind of India is disquieted; and that, in sober judgment, Without sacrificing one atom of the honour of England, without sacrificing one shred of the power and prestige with which we are bound to invest our Indian Government, means of adoption to the new system which must prevail in Asia will be found, and England will have no reason to repent the change, or the policy which she may be induced to adopt in accordance therewith.

But now to commence with the subject, from which I should not have made this diversion but for the accident of public notice: "The Communications, Commercial and Military, of the Steppes of Central Asia with India."

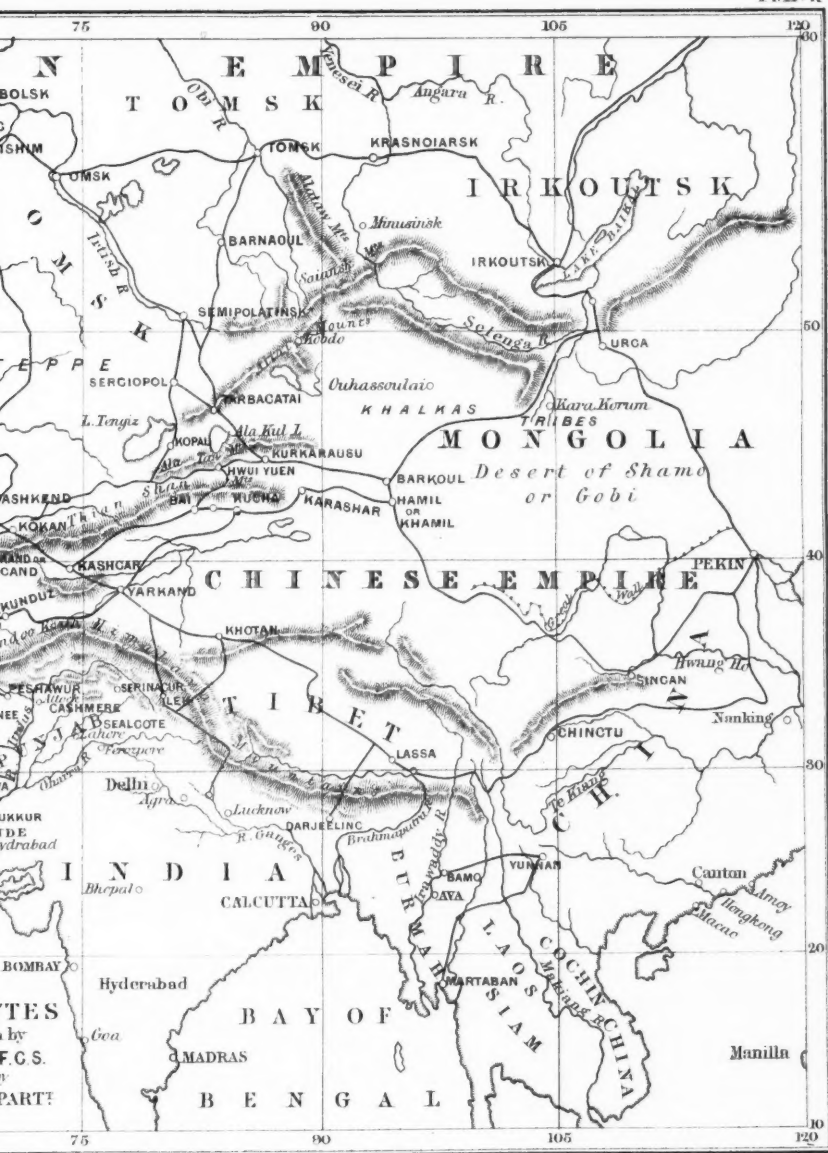
My attention was directed to this subject as long ago as last year. Her Majesty's Indian Department had prepared a most elaborate system, showing the caravan routes as they have existed for some time, the principal marts of commerce, the points at which trade and commerce may be diverted from, or flow into India, and, as I assume, with the purpose of considering some enlarged system of commercial expansion such as has not hitherto been originated or worked into one continuous plan. It occurred to me that possibly having so much of foundation and accurate knowledge from which the basis of an argument could be derived, that it might not be without advantage, especially when we have so many Indian Officers competent to correct with their enlightened criticism mistakes and erroneous statements, to bring this matter prominently before the Institution. The Council assented to my wishes, and the next step was to obtain permission to have a copy made of the Government map. I applied to the Secretary of the Indian Museum, Dr. Watson—I hoped we might have been favoured with his presence on this occasion—and he, with the utmost liberality, placed all the materials at my disposal.

I have also reason to believe—I imagine it will come within the knowledge of many Indian Officers—that there are many unexplored, or if not altogether unexplored, unnoted passes to the northward and north-west of India, through which Officers in their excursions on leave have penetrated, of which they have preserved such records and accurate statistical details as will be exceedingly valuable on a future occasion. Circumstances have prevented me from availing myself of the very obliging permission of the Indian Department of access to those documents. I appreciate the liberality of the offer, and rejoice to think that a magazine of such information is within reach.











Now, I spoke of the two great empires on whose influence the destinies of Asia will rest; and for the purpose of to-day's argument, I mean the Asia that lies eastward of the Persian frontier and of the Ural Mountains. Properly speaking, Siberia can hardly be included in Asia as regards Asiatic characteristics, for it is a country under European Government, and not only under European Government, but under the predominant influence of European laws, habits, and religious observances. Still I shall have to deal with the southern frontier of Siberia, and so far include it in the great Asiatic system.

There are four great masses of power in Asia. Now, the "balance of power," as it has been called, has occupied the attention of diplomatists from the time when a regulated system of diplomatic intercourse arose on the ruins of the feudalities of the Middle Ages. The maintenance of this dogma has probably caused more wars than even dynastic ambition or the baseness of favourites. It is proverbially difficult of handling where the matter in dispute is of small moment, and amongst States occupying comparatively small spaces, and where an habitual equipoise is more or less well assured; but to maintain the "balance of power" becomes of an enormous and excessive importance when it is between nationalities, faiths, nations, occupying portions of a large continent. The four great influences are: the Russian; the Chinese, with the vast dependent tribes of Mongolia, the Khalkas, the Kalmucks—the affiliated Chinese, as they may be styled, who profess a variety of the same Buddhism; England is the third; and the great mass of Mahomedan and Kaffir tribes and nations, in the Asiatic sense, forms the fourth. The question on which we are speaking this day will affect, to a great extent, the future position of that fourth division of Asiatic society, as independent communities.

And, first, with regard to the mode in which the influence of that great people who form the Empire of Russia has been obtained. Surely "they are a wise and an understanding people," who, for generation after generation, without pause, without hesitation, without relaxing a distinct and decided mode of action in the slightest degree, have persevered year by year in the Russian policy, a policy, whatever the estimate that may be formed of it in Europe, that has benefited largely the vast regions of Siberia over which it has extended. It is barely 300 years since Russia, itself an aggregation of conquered kingdoms, found a bold adventurer who dared to look eastward from the slopes of the Ural, and to discover for himself what manner of tribes and regions lay beyond those mighty mountains and those misty steppes which are now within the second line of the Russian frontier. Yermak, the Cossack, in 1580, gained as truly a new empire to Russia as Columbus to Spain. Then began the Russian system with well developed thought, careful intelligence, moving on day by day, first eastward, then southward, employing all the marvellous machinery that accident and nature have placed at the disposal of the Czar to consolidate its resources, till at length the power which in 1580 knew not where to plant a sentry beyond the Ural, in 1867 has its advanced post at Djuzzak, within a few leagues of the capital of Timoor.

It is striking to observe, on the Russian territory, the second frontier, or rather an original frontier of civilization within the second, or southernmost line; and this frontier is studded in its length, far away into the eastward, by forts which became cities, and by cities which have become centres of commerce. Passing from Orenburg to Orsk, and on the alternative or northern line from Perm to Ekaterineburg, Omsk, Tomsk, Tobolsk, Krasnoiarsk, thence eastward to Irkoutsk, are found the marks of that deliberate progress which, being based upon commerce, has, like all operations that result from scientific and beneficent principles, produced its marvellous result in the increase of the Russian Empire. But after a time it would seem that the mineral wealth of the Siberian territory attracted their attention, and the frontier was pushed southward to the centre of engineering operations at Barnaoul, and to its southern dependencies of Semipolatsinsk and the mining stations. Barnaoul, it would seem, is destined to be one of the great centres of power in Siberia, and so far will Russia consolidate the purely European system of administration.

Now, the history of her advance is very remarkable. Russia possesses the services of a race eminently warriors and eminently merchants—the Cossacks. The Cossack can fight and he can bargain; he can abide and he can endure, and he can advance; he can assimilate with the tribes with which he comes in contact, and he has a hardihood and fidelity which leaves nothing to be desired in the character of a colonizing soldier. Judge from the remarkable history of the foundation of a city, destined to be very important—the city of Kopal—in 1846 or 1848. The most instructive writer that has described Siberia and the Amoor, Mr. Atkinson, tells us that he found a Captain of Russian artillery of the name of Abakamoff in a gorge near the Ala-tau range. He had marched for 40 days through rough country with six guns and a hundred men. He had established himself in log huts with his soldiers for the winter, to await the spring, which would bring down with it the usual implements of Russian power, and lead to the foundation of a new colony. And thus Russia is served. On the remotest points of her frontier, an intelligence is visible which beats directly in unison with that of St. Petersburg. Wherever her rule passes her rule is uniform; and on the waters of the Baikal, that inland sea, the regulations of the Russian Navy are doubtless as faithfully observed as in the summer cruises in the Baltic. This brings the frontier to the lowest point southerly to which it had reached previously to the later campaigns in Turkestan.

Thence moving onward in accordance with the circumstances of the times, and I am not here to criticise the Russian policy, the Russian columns pass up the Syr-Daria, occupy Tashkend, Khodjend, Kokhan, and finally halt at Djuzzak. I do not refer to the suggestions of the press, which do not belong to the dignity of a discussion on the acts of a friendly nation. Those considerations may be dealt with by the public. But, in fact, the Russian is now firmly established, and along the whole of the Siberian frontier there is no single point in front of, or athwart which, the communications, military and commercial, that have direct or indirect relation to India, must not pass, and be observed.

We now come to the great basin lying between the ranges of the Indian hills and the plains of China. It is inhabited by a race that preserve, as we have seen in our last war, the military characteristics of the hardiest who, under Jenghis Khan and Timoor, swept Europe well nigh from east to west, and under Baber founded a mighty empire. With regard to the commerce of Asia, this great basin may be called the basin of production. It is confined at its outlet within a narrow gorge by the projecting salient of Russian territory south of Kopal, and the northern salient of Hindustan, where the Hindoo-Koosh rears its crests, and the Himalayas have passes into the Indian Peninsula. Therefore, the communications, considered in their strictest and direct sense, are reduced within a very small and narrow earth-surface. Passing westwards they converge at the centre of Asiatic commerce at Bokhara. With regard to India, currents of traffic are diverted from the main stream of commerce which flows with even flux and reflux eastward and westward, and diverges through Tibet, by Khoten, Leh, and Lassa, and the passes that lead down through the Cashmerian territory into the plains of India. Sweeping round the north-western promontory of the Hindoo-Koosh, they proceed to Herat and Cabul, and may ultimately be determined in no inconsiderable degree to Kurrachee, and thence to the Western Coast of the Indian Peninsula. There are subsidiary streams. There is the commerce that seems to flow backwards, as we might almost say, or westward and eastward, through the passes of the Nepaul hills, and converges at Calcutta. Again, there is a point not so directly connected with the trade of Central Asia as those previously indicated—but which no survey of Indian commerce could be complete without considering—the depôt at which the resources may eventually be drawn and concentrated from the south-western provinces of China, terminating by communications on the sea at Moulnmein. It may be recollected that some years since a distinguished Officer of the Royal Navy proposed to establish a communication with the south-western provinces of China, and especially with Yun-nan. This plan has been submitted to Chambers of Commerce in this country on several occasions. The Indian Government, it is believed, has pronounced against the scheme, but the Chambers of Commerce are of opinion that such a route is practicable. Looking at the proposed route with such information as is at present attainable, it appears that, with certain developments of railway or water transit, it is not unreasonable to suppose that the expected traffic might be developed, and for this reason: it would pass, it is true, through a barren country, but to open out a connection between the abounding Burmese territory and the swarming plains of South-Western China is of such fair promise that loss on the special cost of transit might judiciously be encountered.

The last portion to be considered is, that Turkestan, Afghanistan, the Khanats, and the still unconquered, or at all events insubordinated, regions of the Kirghis, are all concerned in the Indian traffic. And taking Bokhara as the central point from which commerce is to radiate, it appears to me that too much attention cannot be paid on our part to

the interest that India has in the connection with these countries, both in a commercial and from a military point of view.

Bokhara has been defined to be the commercial centre of Asia. The points of ultimate destination are Nijni Novgorod, in the line of St. Petersburg; of Trebizond, important in the Middle Ages, but of which the importance has very much diminished; of Bombay, drawing its communications from Kurrachee; of Calcutta, drawing, to a certain extent, the resources of the basins of Thibet; of Moulmein, which eventually will, it is to be hoped, be placed in direct relation with South-Western China by land; and of Pekin, which has a special and peculiar influence on the commerce of Eastern Siberia and Mongolia.

I attach much importance to the consolidation of our means of transport on commercial routes, because where the merchant travels, the soldier marches; where the merchant brings his wares, the soldier finds his stores; where the native feels the confidence that draws his produce to the bazaar, the soldier gets the daily supplies which are necessary to his support, the General forms his magazines, and thence, a basis of operations.

Now, with regard to the points of destination, Bokhara has settled communications with Khiva; and Tashkend, which has now passed under the Russian sovereignty, with Samarkand, with Cashgar, and with Yarkand especially as a depôt for the Eastern Siberian, and Cis-Himalayan commerce, and for a large proportion of the Chinese trade. To Pekin there are two routes over which communication is made with Eastern and Central Siberia. These routes must be of high antiquity as forming the means of communication with Eastern and Central Siberia before the country had become generally arranged and policed under Russian rule. There is additional reason for this opinion, since on the most easterly, lies the city which is recognized as the chief residence of the Lama of the Northern Buddhists; and I make particular remark upon this point, because I desire before I conclude to advert to a subject which has not yet generally attracted notice, and yet materially concerns civilization, Russian or English.

With regard to the destination of commerce, Bombay, Herat, and Cabul, are intermediate depôts of concentration and diffusion. Many speculations have been formed as to the possibility of establishing or perpetuating fairs and markets on that line, and we know from the records of that noble public servant who perished in Cabul by the assassin's hand, how largely he derived information from the inhabitants of remote districts who frequented those fairs.

There remains to consider the base of Thibet and its dependencies. It is satisfactory to observe that an agent has recently been appointed to Leh; it may be assumed, therefore, that it is the purpose of the Indian Government to increase, if possible, its activity of inspection on a frontier whose policy concerns India so nearly.

It has been asked in the public press, "such and such being the state of affairs in Central Asia, what is to be done?" We are told at home that a policy of expectation, such as has been well



described as a "masterly inactivity," is in favour, and I by no means object to adopting every possible precaution before entering upon a system of policy, in order that when we lay our hands to the plough we may not turn back. On the other hand, our fellow-subjects in India are disquieted, and will require a definite and active policy.

Well, there is the choice of either of two policies. There is the policy of caution as distinguished from distrust; as there is the policy of open demonstration on grounds sufficient to warrant distrust. There is also the fatal policy of placing trust in all representations that are made, forgetting this, that the march of empires is like the sweep of the avalanche; that a nation once committed to a policy, can very seldom recede from it, whatever the desire of the rulers may be; and that, therefore, it is a wise and a justifiable, nay, a necessary, attribute of statesmanship, while you respect, and adopt in their fulness, expressions of amity and peace, to beware lest events be stronger than the speaker, and lest lack of precaution may prove your policy seriously compromised and imperilled at some unforeseen conjuncture, when you would be justified in preparing against untoward fortune, though confidence in Governments, as in individuals, remain unimpaired. The policy of distrust, which leads to overt demonstration, is obvious enough. It is exceedingly easy to push forward outposts, to mass troops, to prepare magazines, and thus undertake the burden, as we have seen unhappily in Europe, of heavy armaments, increasing in direct proportion at each successive stage, until at last, as occurs in all such matters, a conflagration comes from some unexpected quarter. If masses of aggressive force are collected, those masses will assuredly not be resolved into their primitive elements and disintegrated, without serious convulsion and shock. There is no conductor that will draw off the animosity of banded nations.

Again, may it never be British policy to endeavour to interpose obstacles in the march of a nation whose labours are for civilization. It is an advantage to civilization that the barbarous powers should feel the restraining hand of civil, military, and judicial guidance. It was on behalf of civilization, that that great effort has been made, which has left, alas! so many French soldiers on the slopes of the Atlas. It was on behalf of civilization, that Russian power has left many of her soldiers on unnoted fields. It is well for civilization that England has always been prodigal of her sons wherever civilization should be extended, whether it was in the wild hills of Asia, or on the rarely visited shores and lagoons of Eastern Africa. Nor is it consistent with judicious forecast to narrow the field, if there be a field of contest on which an antagonist is to be met, with prudent development of power; be sure that on a great scale of operations, and on a long trial of years, the Government that deserves best, by preparation and foresight, will remain master of the field. Therefore, I do not sympathise with the apprehension so widely expressed in weighing the strength of the great empire to which so much reference has been made. I am prepared to believe that that power will be administered wisely and well.

It is certainly the result of a long-conceived and well-balanced system of policy. However we owe a duty to our own possessions to remove disquiet, that men should know that, as a great statesman once said, "where the British flag has floated, foreign dominion shall not come."

What is the policy I would recommend? Britain is different from other Colonizing States in this, that she unites in her mode of acquiring territory, both the qualities that are necessary for colonization, as against the aboriginal inhabitant, or as against the brute force of unreclaimed nature; and those varied gifts which enable her to reconcile to her rule the dwellers in old constituted monarchies, monarchies which had a place in history, and a glorious place too, before the Roman had visited British shores. She waits for the operations of trade to win influence, while prepared to vindicate the free exercise of that trade by arms. The type of British civilization is the factory; the type of British occupation is the solitary fortress resting on the sea, the base of operations of English war. From what root has the great tree of British power in India sprung? From the root that it struck deep in the soil in Bengal and in Madras, when, as yet they were few, and merchants, and only known as men who were permitted not by any favour won in abject and slavish humility, but who, through force of character, won freedom of commerce with the native states; whence in the fulness of time, and through the exercise of a just policy, and one in subordination to the purposes of civilization, their successors became the prince rulers of wide India. As the policy has been, so the policy should be. It does not appear that we can argue any legitimate distrust of our intentions, if the Indian Government develops our system of trade with a larger and more wide success beyond our Indian frontier, than has yet been attempted.

Some remarks of the accurate traveller and observer, now lost to his country, whom I have before quoted, in which he speaks of the policy as well as of the facility for extending English commerce, are noteworthy.

"In 1849, a considerable quantity of English calicoes reached Yarkand, Kokhan, and Tashkend. They were printed in the two latter towns, in patterns to suit the taste of the people; from their superior quality and price, the Tatar merchants were induced to purchase the goods and carry them in their trading expeditions among the nomades of Central Asia. They also found a ready sale, and the people were delighted with their new garments. Several of these Kalats were shown to me, and their superior quality commented on by their owners. All were anxious to possess them, thus the articles had at once established a character and a trade.

"The following year, when the merchants visited Kokhan and Tashkend, they obtained similar goods, and these were still more appreciated by the Kirghis. In 1851, the Tatar traders bought their goods as usual, which in appearance resembled those of the former years. These were taken by the caravans into distant regions, and they also met with a ready sale. But, alas! the purchaser soon dis-

"covered that he had been victimised, the material proved to be complete trash, and the discovery caused a great reaction. It was a fact well known in Siberia, that agents for English houses were in Kokhan, and from all I could learn, they were natives of India. This was not only a disreputable transaction, but a most foolish experiment, which has done considerable injury to trade among these tribes."\* I quote this as a proof of the facility with which our commerce might be extended to Asia, and I quote it as a warning to those who dare to abuse the civilization which is now going on. He says also with regard to the Indian Trade (p. 354):—"English merchandise will sooner or later find its way into the northern provinces of China, through the Tatar merchants engaged in trade among the Kirghis hordes. I shall, however, point out another and more direct route by which commerce may be carried into these regions, if a fair were established on the Indus. During my wanderings I became acquainted with several merchants who had frequently visited Yarkand, Kashgar, and Cashmere. Between these places caravans often pass, so that various wares are constantly being transported through this country without any extraordinary difficulty. It may, I think, be taken for granted, that wherever trade can be carried on with profit, all natural obstacles have been surmounted. It is a well-known fact that the caravans that travel from Kulja into some of the interior provinces of China, encounter greater dangers than will be met with between Yarkand, Kashgar, and the Indus." I refer to the elaborate map from which the one now exhibited is formed. The accuracy is remarkable, so far as I have had the opportunity of verification. On referring to this map, it will be perceived that, taking as before Bokhara as the centre of commerce, even with the diversion of route to Herat and Cabul, Kurrachee is within nearer range of Bokhara than the Great Russian Fair at present maintained at Nijni Novgorod.

Now my idea is this: Let the Indian Government determine at what spots an effort shall be made to develop Indian traffic. There will arise at each town a centre, not only of commerce, but of political action, and of confidence in British power, which will surround our frontier with, as it were, forts of peace, whence our influence will radiate with certainty, and, I believe, with successful results. I do not speak of the political advantage of obtaining information of a trustworthy character, I put that aside from the great question that affects the commerce of India, and affecting also her military communications, and I say that, as from the factory sprung the Indian Empire, so by the factory it may be extended and perpetuated.

Well, then, with regard to the *ratio ultima*—military operations. For myself, I have no doubt on the subject, if only—and this is a matter that weighs daily more and more on all men's minds—it be remembered that the India that we hold must be maintained by material force, not because our subjects distrust us, but there are those abroad who will overrun and plunder and overrule those subjects if we do not

\* Atkinson, Upper and Lower Amoor, p. 290.

help them. I do not feel the active distrust of that centre of native rule, under many rulers, that lies in the very heart of our territory, to the extent that many do; but it is clear that there must be amongst the native courts, men discontented and ambitious, who rapidly profit by any occasion of disturbance and public disquiet. I appeal to any Indian Officer whether, under special circumstances, a successful and distinguished soldier could not plant his spear and raise thousands of horsemen round his standard in the present day? You recollect that signal example of Sir Charles Napier. When the Chiefs of Trukkee surrendered to his chivalrous character, the news of their capture and submission spread throughout Asia. Men summoned towns in the name of Sir Charles Napier, to surrender, and the towns were surrendered; and Sir William Napier tells us, at that time it was perfectly possible, and I believe it, for his brother to have marched to the shores of the Mediterranean with thousands of horsemen, as the old chiefs did in the times of early history. The elements of uncertainty still float in the political atmosphere of India. The forces of administration of Government must be so consolidated that they who would aspire to combine those elements into agencies of offence will know that they will dash themselves to pieces against the granite strength of Government, for otherwise, all that has been wrought will be wasted. And again, when we have put the hand to the plough, we have no right to turn back. It was not to turn back from great achievements that this small island sent forth her sons to sweep through vast portions of the earth, reclaiming and benefiting the nations as they go. England has no right to practise, or to look forward to an inglorious ease, and to say, "What of this? and what of that? Let us part with this territory or with that possession." Part with any territory where the inhabitants have shewn that they are capable of self-government. Let them go forth into the struggle of nations, blessing and blessed. But where those subjects require, in the weakness of their stunted knowledge, direction and guidance, they must not be abandoned; and the Government in India which neglects to exercise material force, will commit a fault which is the greatest that an English statesman can commit. Apart from the lowering of England in the scale of nations—for what would be thought of England without India—the trust and the talent which is deposited in our hands will have been despised. That is matter for consideration with regard to military defence. I desire to see the maintenance of a well-defined policy beyond the frontier. We shall always be close enough to the frontier if the time of action arises, being prepared as those who wait constantly and watchfully.

There was one further point which has attracted my notice, and which may possibly not be unworthy of consideration. It is remarked in the public press, that Asia beyond India and Russia, is waiting for a Master. It is true! The old qualities of warlike aptitude and readiness for strife have by no means died out either in that great valley, or in the Mahometan and Buddhist kingdoms. There are probably Officers present who were in the last Chinese campaign. Do they remember what manner of men those were that came down from the

northern plains, those Mongolians who fought so well; and who are the descendants, man and boy, of the men who marched westward with Jenghis Khan? Read the accounts of the still unreclaimed Kalkas, their aptitude for war—men that require nothing but grass for their horses—for themselves they will provide. Did you not see, in 1815, what soldiers Russia brought from her extreme east, the Bashkirs, who had marched from a province under the Great Wall to camp under the walls of Paris? Do you not know that there is a fanaticism of an exaggerated type still at work in Bokhara, which is aptly called the “Rome” of the neighbouring provinces? If Asia be left without a master—and by master I mean without the preponderating weight of humanising European influence, that master will be found. Some day the rumour will pass through the Steppes, some revival of a prophecy long forgotten, to tell the tribes that they are again to turn their faces to the westward—men bound to no soil but that where they can find forage for their horses. You would have—it is perfectly possible to imagine such a state of things—you would have a great mass and deluge of barbarian war poured through that narrow gorge between the Indian hills and the Russian frontier; and what race of mountaineers would you find in those hills? Officer after officer, who have employed their intervals of leave in hunting in the higher ranges, have told me, that there, especially at the head-waters of the Ganges and the Sutlej, and so over into Tibet, they have found races, of remarkably solid form and of European composition—men, Tatars ethnologically, but of great physical power, and of European habits to a great extent, who might be combined in an extended exodus of warlike emigration. And remember that the religious element would powerfully sway these tribes;—the whole mass of Buddhism, northern and eastern, of which the forces have not yet been calculated. But the Chinese Government knows them full well; for the Chinese Emperor subsidizes, and keeps in pay the religious chief whose seat is at Ourga, amongst the Mongolians, of whose warlike qualities we have so lately had proof.

It is essential that Asia should be quieted, and that European influences should dominate her regions. I have shown you how I think the English interest may be combined with a sound policy of justice to ourselves, and of fealty to the great member of the European commonwealth, whose frontiers are now approaching our own. But of this I am sure, that if Asia be left without a master, it will matter very little to India what the communications, commercial and military, between those Steppes and the Indian Peninsula may be, for though we may maintain, within our own bounds, the pre-eminence of civil rule, which we have done and suffered so much to secure, yet beyond, it will be one great sea of anarchy, over whose waters neither commerce will pass, nor truce nor peace abide.

The CHAIRMAN: Ladies and Gentlemen, I am sure you will cordially concur with me in expressing our warmest thanks for the able and highly lucid lecture we have heard from Colonel Adair. I, personally, have been at Cabool, and in some of the other countries which he has mentioned, and can express my entire concurrence in the views he has

so lucidly laid before you. I have had much pleasure in acting as Chairman, though I took the place of certainly a much more efficient Chairman, General Eyre.

Colonel ADAIR: Sir George, I beg to return my best thanks to the meeting, for the kindness with which I have been received. And I may beg to say, that I take it as an especial piece of good fortune, not only to have had that expression of opinion from an Officer who has learnt in the hills what the warfare there is, and how to express an opinion thereon, but also as the brother of the great statesman who is now administering the Government of India.

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## **Evening Meeting.**

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Monday, June 10th, 1867.

COLONEL THE RIGHT HON. THE EARL OF LONGFORD, K.C.B., Under  
Secretary of State for War, in the Chair.

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NAMES of MEMBERS who joined the Institution between the 10th and 17th  
June, 1867.

### **LIFE.**

Western, Wm. T., Esq., Navy Agent. 9l.

### **ANNUAL.**

Garnham, R. E. W., Captain 6th West York Militia. 1l.  
Mackinnon, W. C., Captain 87th Royal Irish Fusiliers. 1l.

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## **THE DRESS AND EQUIPMENT OF THE ARMY.**

By Captain ARTHUR WALKER, Temp. h. p. (79th Highlanders).

### *I. Introduction.*

IN treating of the soldier's dress and personal equipment, I shall avoid as much as possible entering into the consideration of what may be termed æsthetic minutiae, with regard to which there must always be great diversity of opinion, and shall simply endeavour to demonstrate that a considerable change in the present dress and accoutrements of the soldier has become desirable, and then attempt to point out generally the form these changes should assume. The important change as to the knapsack and ammunition pouches which has recently been proposed, and may still be said to be under consideration, will be referred to by me in the sequel; but I may here state that with the exception of this and one or two other slight and hardly appreciable alterations, the present dress and equipment of the army are, to all intents and purposes, the same as those which existed before the Crimean War, while the Enfield rifle was still a doubtful experiment, while breech-loaders were still regarded as practical impossibilities, and when, except to a few, the names of Armstrong and Whitworth were alike unknown.

But, since September, 1854, when the dream of European peace



was rudely disturbed after a thirty years' slumber, what a prodigious experience has been our lot in everything connected with war and warfare! First came the Crimean War itself, then the great Indian Mutiny, followed closely by the Chinese War of 1860, and that of New Zealand in 1864 and 1865.

Then there was the Italian War of 1859, with its Garibaldian accompaniments; then the great American conflict between North and South, with the nearly simultaneous insurrection in Poland, followed closely by the war in Denmark; and last, though by no means least, the now famous and ever-memorable "Seven Weeks' War of 1866.

What a martial category is this for twelve short years, and what tremendous results do these twelve years embrace! The map of Europe has been altered and retraced by the point of the sword; new kingdoms have been created, while old ones have been obliterated or so re-constructed that the geographer can scarcely recognize them.

Nor are the changes which these twelve years have wrought in almost everything relating to the art of war less striking and remarkable.

The sentry in the adjacent gateway carries in his hand a breech-loading rifle capable of killing at a distance of a thousand yards, and at the rate of something like ten shots per minute. Nor is his fellow-soldier in the Artillery a jot less advanced, possessing as he does a breech-loading field-gun qualified to deal death at an almost incredible distance, and with a certainty not less marvellous. But this is not all. Our whole system of field exercise has undergone, or is undergoing, a complete transformation since that memorable 20th September, 1854, when our battalions advanced "very slowly" across the plain of Burlic, and up the banks of the Alma River. At Aldershot these same troops may now be seen performing entire field movements at a pace which, unfortunately, as our men are at present clad and equipped, may well be called "killing." Lastly, rifle instruction, military gymnastics, and workshops with every facility for obtaining elementary education, form important additions to the soldier's occupation. To sum up, it appears that our arms, our ordnance, our drill, and many other things besides, have all undergone great reforms and radical changes; but the dress and equipment of the army form an exception—those remain all but unchanged, identical, in almost every particular, with what they were in the early days of the Crimean campaign. This is all the more remarkable from the fact, that every nation in Europe but ourselves has of late years more or less altered their clothing and system of accoutrements and packs, so as to make them harmonize as much as possible with the new conditions of warfare. There are no doubt many who regard this question of "army tailoring," as it has been somewhat sneeringly termed, as a very small affair; in fact, so secondary to the great question of army re-organization and recruitment, that it can well afford to wait until that problem has been finally solved. But although I perfectly admit the necessity of first catching your recruit before *dressing* him, I maintain, on the other hand, that the question under discussion is infinitely larger in its

bearings than might at first be imagined; and that it involves *tactical* considerations of no small importance, inasmuch as it concerns the individual comfort and efficiency of each soldier in the army, and, as a consequence, his capability of endurance and mobility when on active service. At all events, my humble endeavour will be, in the following observations, to show that the subject of army dress and equipment is really one of very considerable importance, and one that cannot be overlooked in the consideration of any general plan for the reconstruction of the army.

I shall therefore proceed to discuss the different items of the soldier's uniform and accoutrements *seriatim*, commencing with his shako, and descending in detail to his boots; but before doing so, I will venture to make a remark somewhat personal to myself. During the six years I was attached to the Schools of Musketry, I had passing under my eyes every three or four months, fresh representative detachments from every branch of Her Majesty's forces. A quota was contributed in this respect from every Regiment of the Regular Army, Cavalry as well as Infantry, from the Militia, the Volunteers, the Navy, and Marines, from Colonial Corps, such as the Cape Mounted Rifles and West Indian Native Corps, and even from the Irish constabulary. It will, therefore, I think, be conceded that, beyond such opportunities of observation as I had in the Crimea, and in India during the Mutiny, I have thus had a particularly favourable opportunity of judging the practical working of almost every uniform in the British service. Moreover, acting on the principle that no one knows where the shoe pinches but the wearer, I seized every suitable occasion for eliciting the feeling and opinion of the officers and soldiers themselves with regard to this subject; and I may honestly say that what follows is not so much my own conception on these matters as the embodiment of the average opinion and feeling of the Army itself.

Having said this much by way of preamble, I will proceed with the details of my subject, as already proposed.

## II. *The Head-dress.*

First, then, with regard to the head-dress. The present shako is doubtless a great improvement on that which our men threw away in such a wholesale fashion in the Crimea, but after all it is still a shako, and any praise must be of a negative nature; its appearance is incongruous and nondescript, although tolerably comfortable for home service—that is in a temperate climate—its deficient adaptability renders it a very indifferent protection for the head in what may be termed hot or cold climates. Now in our service, the suitability of the head-dress under the former condition should especially be provided for; and this remark applies indeed with equal force to every part of the English soldier's outfit, as nearly three-fourths of his service is passed in warm, if not in tropical climates; in addition to which, in cold climates campaigns are now, as a rule, only prosecuted during the summer months.

The head-dress that would seem to be best suited for our service, and regarded by it with most favour, so far as I can make out, is a light and well-ventilated helmet-shaped hat, made either of cork or felt, as may be thought best, such, in fact, as is used in India so much by civilians and officers of irregular cavalry regiments, and which affords an excellent shade for the eyes and protection to the nape of the neck and head generally. A scarf or "pugree," of any texture or colour that may be preferred, wound round the base of the helmet, forms altogether an effective and effectual safeguard against the sun's rays, while in northern latitudes the same addition may subserve the purpose of promoting heat, the whole being at the same time light, cool, and becoming.

Helmets of the kind here referred to have been patented for many years by Messrs. Ellwood and Sons, under the name of "air chamber helmets," and are supplied by them in large numbers to officers of the Indian army. Here is a sketch of that, for example, supplied to the Bombay Staff Corps, together with a section exhibiting the plan of ventilation, &c.:—A. The inner crown to fit the head. Bbb. The air-chamber into which the air is admitted by apertures *ccc*. d. An aperture at upper part of outer crown to allow the air to pass out. *eee*. Tubes for ventilating the inner crown (*vide* Fig. 1).

These helmets are constructed in such a manner, that the rays of the sun falling on the outside of the helmet, are everywhere intercepted by a stratum of air (the best non-conductor of heat) and are thus prevented from passing to the head of the wearer, while at the same time internal ventilation is thoroughly provided for. Messrs. Ellwood assure me that the price of these helmets for the use of soldiers, would only be from about 7s. to 10s., and that they could make them so as to last for four or five years. The cost of the present shako, it is true, is only 4s. 7½d., but then it only lasts two years, so that, assuming Messrs. Ellwood's estimate of the durability of their helmets to be correct, this would make the actual cost about equal; but supposing that the adoption of these helmets should be the means of saving in India the life of even one man in a hundred—a very moderate estimate, which I understand can be abundantly verified\*—and considering that every fresh soldier sent from Europe to India costs the nation £100, in a mere pecuniary point of view, and without any regard to humane considerations as to the increased comfort and better health of the soldier, there would be a great saving.

The weight of these helmets is about half a pound. They may be made sabre-proof, and of course any amount of ornamentation, in the

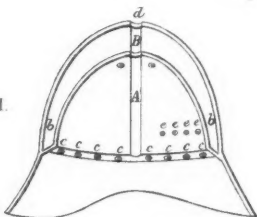
\* Since these remarks were made, I have been informed that wicker helmet hats, with a cotton covering, have already been substituted for the shakos in India and the tropics generally. This salutary change was effected at the urgent representation of Lord Clyde after the Indian mutiny, on the experiences of which my observations were chiefly based. This only serves to strengthen my argument in regard to the want of adaptability in the shako, and as our soldiers have still to do duty in that head-dress in the all but tropical heat of a Mediterranean or Canadian summer, the sooner the above reform is extended the better. Even in England during the dog-days, a helmet hat of the kind in question would prove a god-send.—A.W.



Fig. I

Bombay Staff Corps  
Helmet

Fig. II.



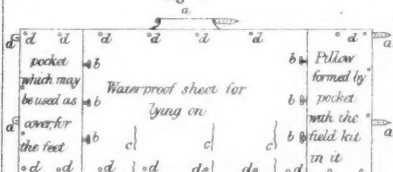
Section

Fig. III.



Showing back view of the yoke and kit bag

Fig. VI.



a, a, shows collar & fastenings available when the bed-haversack is being used as a waterproof cape.  
b, b, toggles for fastening down the pockets  
c, c, fastenings for great-coat when rolled up  
d, d, eyelet holes.

Fig. VII.



Shows the bed-haversack packed with great-coat & kit ready to be rolled up.

Scale of Feet.



Captain A Walker Del.

Fig. VIII.



The bed-haversack rolled up preparatory for use.

Fig. IX.



The bed-haversack made up horse-collar fashion ready for use.

Fig. X.



Should it not be found desirable to wear the bed-haversack as a roll, by taking out the great coat (which can then be worn as in Fig. 5.) the haversack may be folded up into a square (Fig. 10.) and worn instead of the kit bag.

Scale of Feet.



Fig. IV

*Front view of proposed equipment*

Fig. V

*Back view of proposed equipment*

Fig. XI

*Front view of bed-haversack in conjunction with the yoke & dress as proposed by Captain Walker*

Fig. XII

*Back view of bed-haversack, & dress generally as proposed by Captain Walker.*





shape of plumes, &c., may be added; but even without any such addition, such a helmet would surely become Britannia better than a shako. In Highland regiments, or at any rate such as wear the kilt, the Glengarry cap with black-cock feather and badge at the side, such as is worn by the London Scottish Volunteers, might be substituted.

To return to the shako, we understand that its colour is to be altered from blue to dark-green, and this is doubtless a change for the better, green being the colour complementary to red, and therefore the natural one to use in conjunction with a scarlet coat. The helmet hat may of course be made of this colour, nevertheless I give grey the preference, with bronze instead of brass for the ornamentation, for the very practical and sufficient reason that in sharp-shooting—even when in the lying down position, no part of the body is so much exposed as the head, and it is consequently most desirable to render the head-dress as little conspicuous as possible.

The present forage cap should make way for a soft cap, without any stiffening or tuft, shaped so as to fold flat in the kit, and at the same time be comfortable to sleep in when camping out; for this we cannot conceive a better pattern than that of the ordinary Glengarry cap, as worn by our Highland regiments, provided it is made of a better, *i.e.*, finer description of cloth. When properly worn and set on the head, nothing looks smarter or more soldier-like.

### III. *Beard, Stock, and Collar.*

Adhering to the order of detail I have prescribed to myself, I am next met by what may be termed the stock and beard question; for, to a great extent, they hinge on each other. I may at once declare myself an advocate for the abolition of the one and the adoption of the other. At one time, indeed, many of us were under the impression that the dearly-bought experience of the Crimean campaign had settled this question; but, in truth, we military men are so disposed to hold fast and revert to our first love, that it would apparently require more than one Crimean war to wean our affections from that fond ideal of the "British Grenadier," bequeathed to us in connection with Brown Bess and the traditions of the past. But let us examine this matter dispassionately. Two objections are urged against the beard; the first is comprised in that epigrammatic remark of the late Sir George Brown, that, "where there is hair there is dirt, and where there is dirt there will be disease;" but the gallant old General failed to perceive that the same axiom rigorously applied, would involve the shaving of the head as well as the chin.

This favoured theory of the few, was indeed rudely dissipated in the Crimea, where the razor, the soap, the shaving brush, and looking-glass were soon thrown to the winds, and nature, in respect of the beard, allowed to take her course without let or hindrance; and I have been assured by medical men, then present, with great advantage, in a hygienic point of view. Catarrhs or colds, and sore throat showed a marvellous diminution, and many a man was saved "a galloping con-

sumption" by being allowed to secure this natural protection for his throat and respiratory organs. How, indeed, could it be otherwise? Can any more effectual incentive to sore-throat, and all its train of evils, be imagined than scarifying the throat with a razor after lathering it with soap and water, so as to open every pore of the skin before turning out for two hours' sentry-work in a bitter north-east wind, on a winter's morning?

Besides constituting (in the opinion of the superior races of men) a personal adornment, the hair covering the mouth, and the beard over the respiratory organs, are wise contrivances of nature on behalf of man, who, as in the case of a soldier, is compelled by the very force of circumstances to be exposed to all sorts of weather. No doubt nature would have done the same for the woman of our latitudes if she had designed her for a similar and compulsory exposure.

The other argument against the use of the beard by soldiers is, that it would not be "uniform;" everybody could not cultivate a beard, even if they would; but the same may be said of the present regulation-whisker.

Judging, however, from appearances, it does not seem that more than a small percentage of our British race have any reason to complain of a short-coming in this respect; and I contend that, in the matter of mere military set-off, a body of men gains immensely by the use of the beard. Take a good Volunteer regiment, for instance, the *Irms* of Court, and will any one for a moment maintain that the adoption of the beard by them militates against their martial aspect? On the contrary, Mars has always been identified with a beard; and the association once established cannot easily be got rid of.

I well remember the effect produced on the 79th Highlanders, when they received the order for shaving off the beards with which they had returned to Canterbury from the Crimea. A tree with and without its foliage could scarcely present a stronger, or more unfavourable contrast than that of these men with and without their beards.

In addition to this, I may observe that a great change has taken place in the feelings of the community at large, with respect to beards. One has merely to look at the benches of the House of Commons, the pulpits of the Church, at our railway officials, our mechanics, our artizans, and agricultural labourers; in fine, at the faces of the people we meet in the street, to be convinced that common sense has won the day, and that the beard movement has penetrated every class of society in the kingdom.

On what principle, then, can we any longer maintain this restriction as to soldiers, exposed as they are to such extremes of climate and inclemencies of weather? If we want recruits, depend upon it we should not begin by depriving them of this cheap, healthy, and becoming luxury, or rather, most desirable necessity of nature.

Beards or no beards, however—the strange inconsistency at present existing of allowing soldiers to wear the beard in India and during the voyage home, but depriving them of it the instant they return to the rigour of a winter in England or Canada, should surely be rectified. If the physiology of the matter be, as before explained, it is surely

the unwise course we could take, the immediate consequence of which is to send numbers forthwith to the hospital with colds, which may be destined to develop that consumption so fatal to our troops and the nation at large.

If beards were permitted, I apprehend that the leather stock would soon be discarded as a natural sequence. Strange though it may seem there are still Officers who have an affection for "a common soldier's stock," and justify its retention by simply saying that "they themselves never wear anything else," but in answer to this sort of *argumentum ad hominem* when advanced by a certain Brigadier in the Crimea, the *Times'* correspondent made the following pertinent remark, "*Ergo*, because he is riding at his ease on a fine soft-going charger, with nothing on his shoulders, and being spare withal, feels no annoyance from this singular anti-pneumonic apparatus, Private Peter Brown, No. 1 Company, with 56lbs. on his back, 60 rounds of ammunition, a close coat, a water canteen, &c., must positively like to wear a similar article!"

If, as is asserted, stocks are essential in order to make the recruit carry his head in the approved military fashion, by all means let the recruit be drilled (but without his pack, &c.) until this is accomplished; but after the object is attained, why continue its use? it would surely be as unreasonable to continue the use of splints long after the broken limb has become thoroughly set and re-established.

But I am inclined to doubt altogether the necessity for this *stocking* a recruit to make him keep his head up. No man can be made to take up any position habitually by mere restraint. If recruits are properly put through their extension motions and gymnastics, it will be found that the easiest and most natural position is the result, and this, after all, is the object of all training.

It is but fair to state that the stock has been considerably reduced in height recently; but is this enough? we think not, after what has been here adduced; if something is required for the sake of appearance, what is technically termed a "false-stock," consisting simply of a tag of black silk or thin leather, arranged so as to pass across the opening of the collar, would quite suffice. The majority of Officers to my knowledge now adopt this harmless device, which looks quite as well as the real thing, and causes none of its discomfort. Why should not this compromise then be allowed to the soldier, if the present stand-up collar of the tunic must inevitably be retained?

If however, stocks were finally abolished and beards sanctioned, it would I think soon be found expedient to have a neat-turned collar to the coat so as to leave the neck free, open and pliant, as it is with our own sailors and with the French Zouave, whose bronzed face, well trimmed beard, open collar, easy jacket, loose trousers, and well supported ankle, afford I think a far better beau ideal of a soldier's dress, than that we have managed to perpetuate. The turn-down collar suggested, could easily be so made as to stand up at will, dependent on the weather or the want of a beard.

IV. *The Coat.*

I have thus glided into the consideration of the main item in the every day dress of the soldier, viz., his coat or tunic, as it is rather inappropriately called, inasmuch as the tunic was an under garment worn by both sexes in ancient Rome, reaching to or below the knees. Be that as it may, the present garb is generally allowed now to be faulty both in shape and material. The latter, for example, is too stiff and close grained, thereby rendering the garment cold in winter, and hot in summer, and in saying this much, I must not be thought to impute blame to the clothing department, who take I understand the greatest care that every yard of cloth issued should come up to the prescribed standard—it is the standard itself to which I take exception. The lighter and thinner the material, the better, provided it be sufficiently durable, and its texture such as to insure a certain degree of warmth in winter, and coolness in summer—conditions easily attained by adopting a pliant twilled flannel or tweed stuff, such as a man takes to in deer-stalking or grouse-shooting.

In order, however, to facilitate such a common-sense and salutary arrangement, the shape of the present garment must be materially modified. At present it is cut out and fitted too much on the vicious and obsolete principle, that “in a military dress a wrinkle is unpardonable, though a seam is admissible.” It is still too tight over the shoulders, and across the chest, exactly where it should be most easy. The attempt to supplement the present tunic by a cardigan-waistcoat or woollen jersey, or, in short, to meet a decrease in temperature by a corresponding increase of under-clothing, is invariably attended by one of two results, either the bursting of the garment at its seams, or the objectionable sensation of feeling encased in a strait-jacket; so that, contrary to Dr. Johnson’s well-known aphorism, that “a man must either be a fool or a beggar who feels cold in this climate,” the soldier, although neither the one nor the other, has frequently to suffer from excessive cold, without the possibility of counteracting it. The recruit and young soldier for instance, are much exposed to cold during drill, with which great coats would greatly interfere, and, “in the opinion of the medical officers, his clothes are not sufficiently warm. It is therefore supposed that he catches cold more frequently than he otherwise would do, and that, in some cases, this brings on more serious diseases.” These words are not mine, they are taken verbatim from the second report of the Committee on the present system of accoutrements and knapsacks.

The tunic is uncomfortable, too, in other respects. So long as a man has merely to stand up in it at “attention” on parade, it is all right, and looks pleasant enough, but its want of pliancy and its constraint become evident, when the soldier has to perform his position or running-drill, to act as a sharpshooter, or to use the spade in field-work. There is no ease or repose in the garment, and whenever men possibly can, they dispense with it altogether in favour of their great coats, and, at other times, of their shirt-sleeves.

The want of proper pockets in the tunic and shell-jacket is much felt. Surely, of all men, a soldier should have pockets; not mere slits in the tail-end of his tunic, or the sides of his trousers, as at present, but good, roomy pockets, more like those a gamekeeper indulges in. I have often overheard serjeants complain bitterly of this want of pockets. They are expected to carry about with them a roll of their company, a memorandum-book, a pocket edition of the field exercise, and, during the musketry course, registers, pen, ink, &c. Now, at present, they have either to carry these in the tail-pockets of their tunics, or to unbutton the tunic at the breast, and stick in these various articles horizontally, so that, besides protruding in an unsightly manner, it often ends in more than one of them being lost during the day's duty. And if what I have said, as to want of proper ease and accommodation, holds true as to the tunic or "full dress," how much more does it do so when applied to the shell-jacket, which is expensive and tight—hot in summer and cold in winter—with no protection to the loins, where it is most needed, and, of course, devoid of anything in the shape of pockets; yet this is the garment in which we tell the soldier to take his ease with dignity—this is the dress in which we send him out to do a long day's field-work, to make roads or dig trenches.

The remedy for these drawbacks to the present tunic and shell-jacket is, to my mind, very simple and obvious; indeed the authorities themselves seem almost to have suggested it since the beginning of the year, by substituting, in the case of the Officers, for their former buttony, policeman-looking, undress frock-coat, a serviceable and sensible form of patrol-jacket, with good honest pockets and a due amount of adaptability as to an increase of underclothing, which I hold to be so essential in the dress of our soldiers.

Let this then, or something at least on this principle, become the pattern for the whole army, vice tunics and shell-jackets, and let there be but one pattern both for men and officers both as to cut and colour. The officer's patrol-jacket being a dark-blue, is objectionable on more than one ground. On service, for example, on an alarm, officers have been known to turn out, in the hurry of the moment, in their blue undress frock-coats, and with red coats on either side of them, have found themselves acting as so many centres or targets on which the enemy's sharpshooters plied their aim with deadly effect. Apart, too, from any consideration such as this suggests, the appearance of the contrast on parade is bad.

In addition to the ordinary badge of rank worn on the officer's collar, a belt and pouch, containing a field-glass,\* might take the place with great advantage of the present crimson sash, and would serve to mark him out sufficiently, for all practical purposes, from the rank and file.

Abolishing the shell-jacket, and having only one pattern of coat, would be found to have an advantage, too, in an economical point

\* The lecturer here exhibited a handsome Russian leather belt and pouch for a field-glass, designed at his suggestion by Messrs. Burrow, of Malvern.—ED.

of view, for, after a patrol-jacket of the shape and material here contemplated had been worn a certain prescribed time, a new one would be served out for full dress, and the old one would become the soldier's undress. The recruit, on joining, being, on a similar principle, supplied with one new patrol jacket, and another, "partly worn," for undress.

I have spoken of the patrol-jacket as the tunic, so to speak, of the future, but I have done so more because I conceive it to be a step at least in the right direction, based on a good principle of ease, utility, and adaptability, and because Government have already to a limited extent sanctioned it as part of the regulation dress of the Army, than from any conviction on my part that this patrol-jacket is the perfection of a dress, and leaves nothing to be desired. Personally, I confess my feeling strongly inclines to a dress which has of late years been received with much favour by all classes of sportsmen, and known to them as "the Norfolk shooting-jacket." At present I cannot conceive a type of coat better adapted than this for the soldier; it is thoroughly workmanlike, and at the same time thoroughly presentable as to appearance. While sufficiently close-fitting at the waist and wrists, it has the advantage of being comparatively loose across the chest and shoulders and about the arms, while at the same time the skirt is just long enough to afford sufficient covering without at all being in the way. Moreover, owing to the arrangement of flat plaits down the chest, there is ample facility for any number of pockets being placed inside, which at least, in time of war, might serve instead of a haversack; and for that matter, in the case of a forced flank march or such like, instead of his knapsack. At the waist it is drawn in by a cloth belt or band, which can be let out to any extent, so as to give the jacket all the freedom of a blouse, when such is desirable.

In the one I have had made as a pattern, there are two roomy pockets, below the waistbelt, made strong and thoroughly waterproof, and each capable of carrying 10 or 20 rounds of ammunition. On each side of the chest are two pockets, accessible externally, although otherwise quite unobservable; the collar can be turned up or down at pleasure.

The jacket should, I think, be faced at each shoulder with soft red leather, so as to prevent its being soiled and worn by the rifle, as is the case at present. Moreover, this would serve as a slight pad for the butt of the rifle to bear against when at the "present," and so reduce the effect of recoil.

As to the colour of the cloth for our coat, there can be little doubt that for an army of riflemen—as ours now emphatically is—grey, or some good neutral tint, would in the abstract be the best. But, after much consideration, I am inclined to think that we must not attach too much importance to the supposed advantage of the so-called invisible colours for the uniform of at least the body of an army; in practice, at any considerable distance, the mass of intervening atmosphere sufficiently modifies and tones down even the brightest colour, and when we come to anything like close quarters, it really matters little what colour is worn. Indeed, the "flaming scarlet" has then a decided



advantage, from its well known *scaring* effect when worn by the British soldier.

Moreover, Scarlet has been the national colour for many years, and has been worn in all our great victories, and is known as the British colour all over the world. There can be no doubt that for troops of the line its effect is brilliant and imposing. Practically therefore I believe red should be retained for the national uniform.

For my own part, I conceive that the Volunteer force would derive great advantage from assimilating the colour of their uniform with that of the regular army, and adopting the red universally. Firstly, its adoption (for it has already been adopted by a number of corps) is found to attract recruits; secondly, should occasion ever really arise for combining the regulars and Volunteers in the field, the enemy would not distinguish the one force from the other, and thus the two forces would mutually afford each other a sort of moral support; and thirdly, as has been already remarked, when worn by a mass of men, scarlet helps very much to cover (if need be) a multitude of sins as to the individual "get up."

At present unfortunately in the Line, the Officers and Serjeants only really wear scarlet, for the coat of the private is of a dull brick red, which might surely be improved without much additional expense.

#### *Facings.*

I will now say a word as to the "facings" of regiments before leaving this part of my subject, of which I have made, I fear, rather a long tale.

Different facings for different regiments are advocated on the ground of maintaining a regimental distinction and *esprit de corps*, and provided every battalion in the service could have a different coloured facing, I would not have a word to say against a system to which, I think, it is desirable to give the fullest possible effect; but unfortunately for this excellent theory as to facings, it can scarcely be said to have any real existence in fact, for on reference to the Queen's Regulations it will be found that of the 140 battalions of infantry (this does not include the four battalions of the 60th, with their green uniform and scarlet facings), 41 battalions have blue facings, 38 yellow, 21 green, 18 buff, 13 white, 4 black, 1 (the 56th) purple, and 1 (the 97th) sky-blue, so that in reality it appears only two corps, the 56th and 97th, possess what can be truly termed distinctive facings, for it can hardly be said that there is much distinction, or rather distinctiveness, in a facing which is worn by some 40 other regiments, as in the case of blue, and 38, as in the case of yellow. It is rather unfortunate too that blue and yellow facings should so largely preponderate, for, and in this I think the ladies will agree with me, of all colours, these two are least suited to be worn in combination with red; in common parlance, "they don't go well together."

It is obvious, indeed, that even if it were possible to give every battalion of the 140 a different shade of colour, in the majority of cases, harmony of colour and good taste would have to be sacrificed.



In my opinion, therefore, it would be much better to rely on something else for creating a regimental distinctiveness.

#### *Badges.*

Let each regiment, for example, have a separate crest and motto assigned to it, taken, if possible, from the county with which the regiment is, or ought to be, associated and connected; and let this, with a regimental monogram likewise perhaps, be worn as an ornamental and distinguishing badge in some conspicuous place. Different facings could then be abolished, and merged into one, viz., that most suitable and becoming. Perhaps the claim would then lie between green, black, or white.

But while favouring the continuance of simple distinctive badges for different regiments, the present system of each regiment having a button of its own, and a separate pattern of lace, involving, as it does, much trouble and expense, is to be deprecated.

The buttons, like those used by the Volunteers, should be made of bronze, so as to dispense with the constant furbishing required. At present each soldier has to carry about with him what is termed a "brass button," and brush for that special purpose. In like manner, with the badges generally, bronze might surely be substituted with advantage for the shining brass, which is not only vulgar-looking, but is likely to attract the observation of the enemy from a distance.

#### *V. Underclothing.—Trousers, boots, socks, and great-coat.*

I must now mention what in polite society is usually an "unmentionable" topic, viz., trousers. These, as at present shaped, are generally made too tight across the thigh and at the knee, so that firing in the kneeling position, for example, is rendered irksome and uncomfortable, unless indeed they mercifully give way, as not unfrequently happens during the rifle practice. Then, as to their colour. Surely black or Oxford mixture, as it is termed, is about the worst that could be selected for a man who has to march along dirty and dusty roads, or to take part in a review in the Long Valley at Aldershot, or dodge about in rifle-pits and trenches, often on all fours.

This colour shows every speck of mud or dust, and has besides the optical disadvantage of dwarfing the apparent height of men. In ordinary life we almost invariably have our trousers of a lighter shade than our coat and waistcoat, but in the Army this principle is reversed.

Black, as a colour, moreover, is too often made use of as a disguise for inferior cloth; and certainly the present material for the soldier's trousers is very indifferent. There is little or no wear in it, and it sadly lacks pliancy and freeness. In a wet day the lower part of the trousers, which are bell bottomed, is squeezed, as well as may be, into an impossible sort of straight cut leather legging—for all the world like a fire-bucket—reaching from the calf to the boot.

Thus it appears there is room for modification in the trousers, both

as to shape, colour, and material. The last should be exchanged for a good light, strong, pliant tweed stuff: and as green, as has been already remarked, is the colour complementary to red, why not adopt a good shade of it, toned down by a judicious intermixture with a brownish-grey—something such as the Master of Lovat's mixture, for example. This would be infinitely better suited than black for setting off red jackets, and marching along dirty roads in.

With regard to shape, they should be made rather tight over the hip, with a strap and buckle behind, so that when engaged in any arduous work, such as using the spade or pick-axe, the braces, which I would still retain, might be let out, so as to free the movements of the chest and arms. During a long march this power of being able to ease off the braces, allowing the trousers to be supported by the strap at the hip, and so relieving the shoulders from their drag, is a great relief. Otherwise the trousers should be made large and roomy round the thigh, with ample width down the small of the leg, so as to be available at option as knickerbockers, like those of some of the metropolitan Volunteers; but to carry this idea out properly, the present nondescript legging should make way for a good brown leather legging, buttoning over the calf, so as to act as a greave, and extending down to the ankle, to which it should afford support; a legging, in fact, more such as Mr. Grant, in Piccadilly, supplies to English sportsmen for going through stubble fields or riding to hounds, or at any rate harriers in, for your English squire and yeoman farmer find it equally well suited for exercise either on horse or foot.

And here a question obtrudes itself which has recently received considerable attention, namely, the desirability and possibility in future wars of cavalry acting more or less as mounted riflemen. This, in effect, would be to revert to the original use of this arm. The so-called cavalry of England was formerly composed of some regiments of horse and the remainder of dragoons. These dragoons were, in point of fact, mounted infantry soldiers, equipped with long musket and bayonet, and taught to engage on foot. Should, then, this ancient method of fighting be reverted to, as is so strongly recommended by Sir Henry Havelock\* and others, I maintain that the dress I have here endeavoured to describe and prescribe for the infantry soldier, would be found equally well-suited for mounted-riflemen or riflemen mounted.

Other notions as to the joint arrangement of trouser, legging, and boot will no doubt suggest themselves, but I cannot afford time to discuss them here, and I am inclined to think that on the whole the foregoing plan will be found most simple and practical. There is however a great deal I think to be said in favour of adopting a good brogue or broad-soled shoe, instead of the boot—the advantage of a spare pair of shoes in the kit instead of boots is very considerable, both owing to their being less bulky and less weighty—and there can be no doubt a man is more nimble and better fitted for running in a well fitting shoe than in any description of boot. The objection is that in loose

\* Vide "*The three main Military Questions of the day*," by Colonel Sir H. Havelock, Bart. Longman.

soil it is apt to admit stones and gravel over the side, this however could be to a great extent prevented by having a well shaped and closely fitting gaiter; by having the trousers to terminate in a band with a couple of buttons just above the ankle, this gaiter could be made high enough to cover this band, and to form a protection for the lower part of the leg. The gaiter might either be made of stout canvas sail-cloth or leather, with a stout piece of whale-bone running up the back seam, so as to make it fit close to the calf of the leg and give an elastic support to the ankle.

The sock should be of thick soft wool and well fitted to the foot. This latter condition is often apt to be lost sight of. Marshal Saxe, however, whose maxim as to soldiers' legs is so often quoted, gave this, as well as the make of the boot or shoe, great attention; and if these points were considered of such importance in times past, how much more urgent is the necessity for attending to them in the present day, when a soldier is called on to execute the chief movements of a field of battle at a speed hitherto reserved almost wholly for the bayonet charge. Under such circumstances it is self-evident that his shoes and his socks should be equally adapted to freedom of action with the least possible impediment or irritation. A boot which pinches the joint of the great toe or rubs a hole in the heel, and so converts every step into positive pain, will knock a good many miles off the distance a man can walk in the day, and a good many pounds off the weight he will be able to carry with any degree of ease.

Considerable pains have I believe been taken of late years by the authorities to improve and reconstruct the present blucher boot. It has been made higher, and broader in the sole, and there are no less than thirteen carefully selected sizes to choose from; but to reform a blucher boot is rather a thankless task, and one might as well try to make a good sailing vessel out of a ship whose original lines have been faulty, or a silk purse out of a sow's ear, as to make a really good comfortable boot out of the British blucher, the wearing of which appears to be reserved as the peculiar privilege of the British soldier. The original lines of this boot are faulty, and it must always be more or less clumsy and badly fitting: it generally lacks room at the toes, and has too much of that commodity at the ankles. That something is wrong, I think is shown by the fact that upwards of 70 men out of a battalion of 500, were laid up with sore feet marching from Aldershot to London, but this was a few years ago, and possibly before the reconstruction already alluded to.

The new army great-coat appears all that could be wished: although I hear the men complain of its weight naturally, more especially after its having got saturated with rain. The cause of this last complaint might be alleviated to a large extent, if not entirely obviated, by having the cloth well dipped in a solution of alum, so as to render it partially waterproof. The great difficulty is of course to reconcile this property with a due amount of ventilation. I understand the experiments are however, shortly to be made by the authorities with an invention which professes effectually to overcome this difficulty.

VI. *Knapsack, Belts, and Pouches.*

At the risk of being deemed tedious, I must now say a word or two in regard to the present knapsack and accoutrements. A weight of 56lbs. or 4 stone, which is really about what our soldiers have to carry in the field, is no easy load even when packed and placed in the most convenient manner; but in the soldier's case, the circumstances under which this burden is supported, are the least favourable to the mechanical construction of the human machine. The weight so far as the pack is concerned, is so applied that it is thrown out of the centre of gravity of the body, and thus entails a greater expenditure of muscular force than would be required under a better arrangement. The knapsack straps cut under the arms and cause swelling and numbness of the hands, and the weight of the pack is thrown upon the great nerves and arteries of the arm-pit, so as to produce those serious disasters to the soldier's health and effectiveness to which public attention has recently been so much directed. But the effect on the health is not the only objectionable point in the present accoutrements and packs. They are irksome and uncomfortable to boot. The cross belt, when 40 or 60 rounds of ammunition are carried, is not only felt tight across the chest, but the pouch moves and bumps against the man, so that when doubling, soldiers are often to be seen vainly endeavouring to steady it with their disengaged hand, while as to the expense-pouch I can vouch for it, from my Hythe experience, that a "skirmishing practice," is rarely gone through without the soldiers losing some rounds of ammunition, owing to its faulty construction, the fact being that unless the flap is buttoned down each time after a round is withdrawn, it remains gaping open, so that when the soldier "doubles" up to his front rank man, one or more rounds are pretty certain to jump out.

Hitherto, likewise, all the careful training devoted to musketry is at present to a considerable extent neutralized, and rendered nugatory by the position of the knapsack and belts.

Then as to these belts themselves, can anything be more clumsy and unwieldy, or better calculated to catch the eye of the enemy in the field? They are in no way better, in fact, they are in no respect so good as plain brown leather belts, which age improves, and which dirt does not disfigure; they have to be constantly kept white with pipe-clay, adding another item to the field-kit (and, it should be remembered, that "every mickle makes a muckle"), and involving thereby much time and trouble. This killing of the soldier's time is alleged however, as one of their advantages; but, surely, in these days, a soldier's time would be more profitably occupied in the gymnasium, the garden, the library, or the workshop than in pipe-claying belts and burnishing up metals. The smart, clean look imparted by the pipe-clay vanishes in the field and they appear smudged and disfigured, nay, even after rain in peace-time, they present but a sorry aspect.

It would be waste of time to expatiate more than I have done, on the defects and short-comings of the present packs, pouches, and belts.

The system thereby represented may virtually be considered as doomed, for in the able report recently issued by the Committee which Government appointed, "to inquire into the effect of the present system of accoutrements and knapsacks on the health of the infantry soldier," I find it stated, that of all the systems examined—and no less than twenty were brought under notice—the Committee conceived the English pack-system to be the worst.

But here I must take the opportunity of expressing my grateful acknowledgment and appreciation of the readiness with which I have been allowed access to the results thus far achieved by General Eyre and his colleagues. These results are by no means slight, and I can honestly say that it needed no consideration of the kind in question, to enhance the high estimate I have formed of the Committee's proposals. In this, after what I have said, I shall readily be believed, when I state that among other reforms contemplated, the Committee recommend the abolition of the knapsack, the pipe-clayed belts, the present cartouche-box, and expense-pouch, together with the possible adoption of good pockets in the tunic, at least in war time. This is not all, but it is enough to show that should their recommendations be carried out, a new era will be marked in the history of the equipment of our Army.

Under these circumstances I need offer no apology for here summarizing as best I can, the report in question, as it contains matter of much interest to the whole Army, and, I might say, to every Englishman.

General Eyre's Committee was appointed about three years ago, with the object already mentioned, and it sent in its first report during the year 1865. Since then however, public attention became specially directed to several of the points I have already dwelt on, notably so, to the species of corn found on the soldier's heart (the consequence, according to medical testimony, of the pressure of the belts and the strain put upon the body by the present heavy equipment), and to the increased rapidity with which military movements and manœuvres are now-a-days planned and executed, so as to keep pace with that free communication which is afforded by the facilities of steam and of the telegraph.

In their first report, the Committee advised that trials should be made of various plans in use in the armies of Europe and America; but defects were found in all of them. They therefore set to work to devise some better scheme, and in their second report bring forward another system, which is now on its trial.

The Committee fully appreciate the lessons to be learnt from the facts in connection with the late German war; and that the conditions of modern war require that the marching power and endurance of the soldier should be nursed in every possible way, whilst the introduction of the breech-loading system, and the consequent rapidity of fire thus obtained, demand that the men should carry a large amount of ammunition.

The members of the Committee are unanimous that very little is needed to make up the "war kit" of a soldier, and that his efficiency and health suffer far more from his carrying too many things than from

his occasional and temporary absence from any two or three articles of his kit; they therefore propose to limit his field-kit to the following articles:—

- 1 flannel shirt.
- 1 pair of socks.
- 1 towel.
- 1 pair of boots or shoes (the latter preferred).
- 1 hold-all, with its comb, razor, soap, and brush.
- 1 soft forage cap.
- 1 brush.

This differs from the present field-kit in the absence of trousers and blacking, and it is proposed that as the regulation boots are very bulky, as well as heavy, a pair of shoes should be substituted in the kit for the boots—a suggestion I, for one, heartily endorse.

This would represent a clear gain in the weight of the kit itself of about 2 pounds 5 ounces; but this is more than neutralised by the Committee's proposal that the quantity of ammunition carried, at least in the battle field, should be increased from 60 to 90 rounds.

The weight of a soldier's equipment—what he must carry, irrespective of the carrying-apparatus itself,—the rifle, the haversack for provisions, water-bottle, and blanket, would then amount to from 23 to 24 pounds, made up as follows:—

The kit, as given above.....	6 to 7 lbs.
The great-coat .....	6 lbs. (nearly)
Ammunition—90 rounds .....	9 to 10 lbs.
Canteen or mess-tin .....	1½ lb.
Bayonet .....	1 lb.
Total.....	23 or 24 lbs.

The apparatus recommended by the Committee for carrying the above has been reduced from 10 pounds 2 ounces (the weight of the present pack and accoutrements) to about 4 pounds 3 ounces, giving a difference of 6 pounds in favour of the former, and making a total weight for kit and carrying apparatus of about 27 pounds. To this has to be added the weight of the rifle and slings—9½ pounds, and the man's clothes—10 pounds; so that, after all, the total weight (46½ lbs.) is a heavy one.

It is proposed that the greater part of this weight, or what constitutes the kit, as before detailed, should be carried upon the yoke principle of Sir Thomas Troubridge, identical with that adopted by milkmen, by which the weight is borne by the shoulder-blades, and direct from the centre of gravity, the yoke itself being of leather (*vide* Figs. 3, 4, and 5). The weight of the ammunition is distributed in front in two long and narrow pouches, made of soft leather, each capable of holding 30 rounds, while of the remaining 30 rounds to be provided for, 20 go with the kit in two small pouches, and the other 10 rounds (loose) either in an expense-bag, worn on the right side, or, "*in a pocket below the waist-belt in the man's tunic*, thus avoiding an extra article of equipment."



The pouches in front project scarcely at all from the body and are easily accessible, and, although attached to the waistbelt, the weight is borne entirely by the shoulders, and therefore not by the ribs and stomach; in addition to which the principle of balance is introduced by making them act as a counterpoise to the weight behind. Of course during peace only one pouch with the usual 20 rounds would be used, the other pouches being easily distributed in the time of war.

With regard to the manner in which the kit itself should be carried, the framed knapsack is condemned, it being stated, that though the frame gives an appearance of neatness, it is at the expense of increasing the weight and preventing it being suitably adjusted. A kit-bag is, therefore, to be substituted, placed low down, so as to leave to the muscles of the neck, shoulders, and shoulder-blades, the freest action, and more perfect expansion to the lungs. The weight is distributed in three directions. "By means of straps passing to studs fixed on the yoke-strap in front, and to the yoke at the back of the neck, its chief weight is brought on the yoke. It rests, secondly, in parts on the sacrum, or strong connecting bone of the hip, and at pleasure it may almost be carried there to relieve any pressure of the yoke; it is also strapped to the waistbelt in front, and is thus partly borne by the belt, partly by the yoke" (*vide* Fig. 3). I have given here the exact words of the Report. So great is the ease with which the kit may be carried in this manner, that the Committee feel confident, that provided its contents are limited to the extent they suggest, no man would feel distressed, or tempted to throw away his kit, even in the heat of action, and certainly, so far as its merits have as yet been tested, this anticipation, however sanguine, would almost seem to be corroborated. Nothing can be more satisfactory than the reports that have been sent in, both from Colchester and Hythe, where it has been for some time on trial. At the former place, in reply to Colonel Tidy, one man said, "I can not only march with ease, Sir, but I can run and jump with this pack;" and I have it from General Hay himself, that it is in his estimation a great success, that its adoption would materially improve the shooting of the Army, and that, as for the men, they pronounced so strongly in its favour, that they parted with it for their old friend, the square box-knapsack, with the utmost possible reluctance.

The great coat is folded in a square and attached to the yoke by a strap at the back, which will also carry the canteen (*vide* Fig. 5).

It is suggested that the haversack, if made a little smaller, might be suspended from the waistbelt, or that its necessity might be done away with altogether in time of war, *by having good pockets in front of the tunic.*

It is intimated that a better contrivance ought to be substituted for the present water-bottle, which is stated to be heavy, and very inconvenient and objectionable in every way, and in this I think every soldier will agree.

"Good black bridle leather" has been employed for the yoke and straps, the Committee rightly fearing that buff would yield too much



to the rain, and that its inconvenience on service, when pipe-clay cannot be procured, is also thus avoided.

This comprises the substance of the report, and the advantages claimed for the new system therein proposed may be briefly summed up by stating, that the burden is diminished by several pounds, notwithstanding an increase of thirty rounds in the quantity of ammunition carried, the weight distributed on correct mechanical principles, and all injurious pressure removed from the lungs and arms.

I understand that a difficulty as to the straps and belts being black has presented itself, it being found that the dye is liable to come off to a certain extent. The Committee appear to have adopted black in preference to the natural colour of the leather from a desire to maintain uniformity, for in the words of their report it is stated "a regiment could then be kept in uniform tint, which is not the case with brown leather." But surely this is splitting hairs, and making a mountain of a molehill; it is a very easy matter indeed to make a new bridle or saddle look like an old one, and so the old and new brown leather belts could by a similar process be made as like each other as two peas, if we must have it so for uniformity's sake.

The point to which most exception to the proposed arrangement might be taken, appears to be the position of the mess-tin, at the top of the great coat, just behind the soldier's neck (*vide* Fig. 5). It certainly appears to be in the way there, besides having a very awkward look. I should have thought it could have been carried much better, on the centre strap of the valise, so as to lie flat upon it, but the objection to this I am told is that, with our close formation in the ranks, it might come in the way during the formation of fours, for example, but I think this may be got over in a way I will presently suggest.

Meanwhile it is obvious that this is a mere matter of detail; what is now wanted is that General Eyre's plan should receive a more extended trial, and this, I believe, has been decided on by the authorities. If the new system be found good after a fair and sufficient trial, let it be adopted, or if any better can be brought forward let it be replaced, but do not let this opportunity of remedying the present evils be coldly discarded, simply from an idea that the new system deviates too much from the existing patterns.

I have been induced to make these remarks, because it appears that objections have already been raised—even at this stage—to the yoke-bag, on the ground that it departs too much from the conventional model, and that it is too great an innovation on the traditional equipment of the army. But should the yoke-bag possess even one-half the practical advantages anticipated, it cannot be believed that any such opposition, owing to its novelty of appearance, can for one moment be allowed to prevent its adoption.

Having felt bound to say this much in explanation and favour of the new yoke-bag and system of accoutrement, I will now offer for consideration what I conceive would form a considerable improvement in connection with it; nor is there any inconsistency in my so doing, inasmuch as the amendment I propose suggesting is in entire har-

mony with the general principles of the new system, and merely one of those changes in detail which will doubtless present themselves while the new plan is still on trial.

In the first report of the Committee it is well remarked in reference to one of the packs tried, that "it seemed absurd to weight a man with a box weighing  $5\frac{1}{2}$  lbs., to enable him to carry a weight of  $7\frac{1}{2}$  lbs.," but in principle the same argument holds good, although in a greatly modified degree, in regard to the new yoke-bag itself, and a kit of merely 6 lbs. weight, as now proposed. I have always felt that it would be most desirable if the weight of the medium, whatever its nature, employed for carrying the kit, could likewise be made to subserve some good practical purpose. This I have endeavoured to effect by substituting in lieu of the kit-bag a bed-haversack, consisting of a rectangular piece of waterproof sheeting, 6 feet 6 inches long, by 2 feet 6 inches wide, having a pouch at each end to contain the kit, each article of which is kept in its place by webbing or elastic, the open ends of these pouches being fastened and secured by toggles (*vide* Figs. 6 and 7).

Thus, taking the field-kit recommended by General Eyre's Committee as my standard, in one pouch I place 1 pair of shoes, 1 hold-all, and 1 brush, and in the pocket at the other end 1 flannel shirt, 1 towel, 1 pair of socks, and 1 forage-cap; the great coat is rolled up lengthwise, and attached to fastenings, placed for the purpose along one side of the waterproof, and of course inside (*vide* Fig. 7). The whole is then carefully rolled up, and fastened with a strap, or if preferred with a cord by means of eyelet-holes provided for the purpose, so as to form a long waterproof roll (at no part perceptibly thicker than a great coat rolled up in the ordinary manner) which serves to act as a hold-all on a large scale for the soldier's kit and great coat (*vide* Fig. 8). On the line of march this roll would be carried diagonally across the left shoulder, horse-collar fashion, the ends being fastened together at the right side by a simple strap and buckle (*vide* Figs. 9, 11, and 12). By this means the knapsack difficulty is got rid of, and the soldier is at the same time supplied with the inestimable advantage when camping out, of a waterproof ground-sheet to lie on. This alone would be the means of saving many lives in a campaign.

When used for sleeping on, the whole kit would be placed in *one* pouch, so as to act as a pillow, while the feet might be protected by the pocket at the other end (*vide* Fig. 6), the great coat, being rendered waterproof as before mentioned, being used as a bed-cover. At other times this waterproof could be employed as a rough and ready waterproof cape, to be worn over the great coat or otherwise (the kit still being retained in the pockets, distributed as before described); for this purpose armholes, arranged so as not to interfere with its waterproof qualities, have been provided, together with a small collar, to make it fit close to the neck, and straps and buckles for fastening it together (*vide* Fig. 6, AA).

Occasionally the men might be allowed, with obvious advantage, the waterproof to practise their first-class firing on in the lying-down position now sanctioned, in the case of the ground being wet or damp,

so far as the preservation of their health and clothes is concerned. Or again, on emergencies, when combined with one or two others by means of the eyelet-holes and straps, these sheets might be made to act as an *extempore* shelter-tent, piles of rifles supplying the place of tent-poles.

In point of weight, there would be little or no difference between this bed-haversack and the kit-bag, &c., proposed by General Eyre's Committee; and the cost, when made up in large numbers, would not be considerable, although for a really good article 8s. or 9s. would not be deemed too much, I imagine.

Having thus provided for the kit and great coat, I propose that all the other weights, including ammunition, mess-tin, and canteen, should be arranged, on a principle of balance or counterpoise round the waist-belt, which by the plan of carrying the kit here suggested, is left quite clear, and owing to the admirable manner in which it is supported from the shoulders by the yoke, is obviously the natural place for attaching these weights to. The present water-bottle might be replaced by one of metal, or stout glass covered with leather, shaped after the manner of a hunting flask, so as to conform slightly to the shape of the body, and the mess-tin might be altered in its shape on a similar principle. The ammunition would be disposed of in the manner proposed in the report already quoted, except that I would dispense with the expense pouch in favour of the waterproof pockets provided in my Norfolk jacket (*vide* Fig. 11), and in like manner the breast pockets could take the place of a haversack.

My original idea was to use the bed-haversack in conjunction with a set of belts devised by Colonel Luard. These belts have the merit of great simplicity, being made on the principle of a pair of leather braces supporting a broad waist-belt by means of studs, from which they can be readily detached. The weights, &c., would be distributed round this waist-belt in the manner already described, and supported from the shoulders on a principle similar to that of the yoke.

I anticipate that exceptions will be taken to my proposed mode of carrying the kit and great coat on two grounds, the first being that a roll of this kind would embrace the chest and back too much, and so re-produce some of the evils of the old system. In answer to this I have merely to say, that in reality the roll is so open that it seems to create little or no pressure of the kind referred to, while the weight is all but entirely supported by the shoulder; and also that the men themselves, when allowed a choice, prefer apparently to any other, this horse-collar manner of carrying the great coat. Both the Prussians and Austrians, I understand, carry it so. I have likewise the assurance of Dr. Parkes, of Netley Hospital, that in his opinion there would be no objection, on sanitary grounds, to this mode of carrying the kit. However, if that manner of carrying the roll was really found objectionable, it could very easily be folded up in a different and less extended shape (*vide* Fig. 10), and carried on the yoke at the back where the valise now is; the great coat being taken out and carried in the manner proposed by General Eyre's Committee (*vide* Fig. 5).

The other objection likely to be urged is of a different kind, and one

to which several other details in the new equipment mentioned may appear more or less open, as, for instance, the suggestion of putting the mess-tin at the back of the valise. It is this, that these innovations and the mode of carrying the great coat and kit suggested are incompatible with the maintenance of that close order which is so much insisted on, especially when our men are working in line and performing the manual and platoon exercises. But with regard to this, breech-loaders may be said to have all but annulled the platoon exercise, and the sooner the manual exercise is correspondingly modified the better. Why, for instance, should the "long shoulder," as it is called, be retained? The Volunteers who are armed with the long Enfield, I understand, invariably drill as with the short rifle, and so avoid that awkward movement. As to the soldier maintaining that delicate touch in the ranks "by feeling the thick part of his "neighbour's arm below the elbows," I have on a former occasion in this theatre advocated its abandonment for a freer and more healthful formation.\* By compelling the soldier to keep his arms rigidly at his side, we diminish his strength, lower his capacity of endurance, and greatly retard his rate of marching, while at the same time we prevent him, by this close formation, from giving full effect to his rifle when firing, or to his bayonet in a hand-to-hand encounter. The soldier soon finds out that in actual practice, in making an advance on rough ground, or as soon as a gap or two has been caused by the enemy's shot, the maintenance of this "delicate touch" is a physical impossibility; and having discovered the impracticable nature of one tenet in the drill taught him in the barrack-square, he is too apt to infer it is so with all. He thus loses confidence in his instruction and instructors, his sense of discipline is impaired, and he is no longer so good a soldier. The simple moral of all this is, that we should not in time of peace teach soldiers that which disappears at the first touch of real trial in time of war. Let the touch in the ranks be by the elbow as men stand naturally—30 inches say instead of 21—and when on the march let men move more by the instinct of the eye as to distance and dressing, just as keepers and under-keepers beat a cover in a loose yet regular line.†

#### VII. Conclusion.

This, stated very roughly, is the nature of the modification, I think, should, if possible, be attempted in connection with the yoke-system; but suppose every difficulty overcome, either as to this modification or to the yoke-bag plan of General Eyre's Committee, the fact still remains,

\* *Vide* "Coast Railways and Railway Artillery."—*Journal of the Royal United Service Institution*, vol. ix.

† Since these words were written and delivered, the Field Exercise for 1867 has been promulgated, and the position of the soldier henceforth is thus defined:—"The arm to hang easily from the shoulder, the elbow slightly turned out, the hand open, with the knuckles inclining to the front. The average front of a file to be 24 inches." This so closely harmonises with the views expressed above, that the difficulty there referred to, may be said no longer to exist.—A. W.

that the soldier will have to carry a weight when in the field not far short of 50 lbs., and the question will doubtless still obtrude itself, can any system be devised whereby the soldier shall never be divorced from his baggage, and yet be free from the toil of carrying it? General Eyre's Committee meet this question by a decided negative. "To leave the soldier, they say, without some articles of his kit on active service, would not only deprive him of comfort, but would be injurious to his health; while the attempt to carry his war kit for him in carts, &c., would be simply impracticable in nine cases out of ten." It cannot indeed be wondered that they should take this view of the matter, for the problem is one fraught with the greatest difficulty, and is one which would require both more time and ability than I can devote to its discussion.

But although I am inclined to agree at the present moment, and with our present light, in the wisdom of the Committee's conclusion, I cannot forget that this word "impracticable" has often been applied before now by Committees to matters which in the end have come to pass—breach-loaders may serve as an example. I cannot forget that "force used is force expended;" that if a horse is over-handicapped he will lose the race, and that what a pound is to a horse an ounce is to a man. Nor should what has actually been accomplished in this respect be lost sight of; witness Stonewall Jackson's flank marches, and what the Garibaldians did on more than one occasion: how in India our men literally carry nothing but their rifle and ammunition; what the Sardinians effected in this way in the Crimea, and what the Prussians have more recently brought to pass from availing themselves more freely than has hitherto been done of the modern facilities of transport and of telegraph.

If it be an axiomatic truth that, in modern war, no army can move without artillery, could not the same roads be made available for bringing reserves of clothing, &c., to the front, while the soldiers themselves might carry some of their ammunition, for which transport had formerly to be provided? Is it not indeed possible that the day may yet come when traction-engines may be seen doing the work of multitudinous horses in the rear of a field of battle?

Meanwhile we must be content with General Eyre's salutary compromise that although men must carry a war kit, this kit must be reduced to the smallest possible amount. In this, I think, we shall all heartily concur.

I fear I have trespassed already only too much on your time and your patience. I would merely say, in conclusion, that although the remarks I have here hazarded have special reference to the infantry soldier of the Line, the principles involved apply equally to all branches of Her Majesty's service. These principles are simply, that efficiency should be the primary, and appearance the secondary consideration in the soldier's dress, but that the latter may be made perfectly compatible with the former, and that a man may be soldier-like, and yet be clad in an easy, sensible dress suited to his work, just as a man may be sailor-like; and to this I would add the assurance, that whatever the nature of these remarks, or whatever

their merits or demerits, far from having been offered in any spirit of dogmatism or opiniativeness, they have, on the contrary, been prompted purely and solely from a wish to have this subject thoroughly ventilated, and from a desire, if possible, ultimately still further to promote the health, the comfort, and the efficiency of the English soldier—a desire in which, I am well aware, none more fully participate than the present Military Authorities themselves, who, I sincerely believe, to quote the words of His Royal Highness the Duke of Cambridge himself, “in the course they adopt, are not influenced by impulse, favour, or affection, but solely by a desire to maintain this country in the high and noble position she has so long enjoyed.”

The CHAIRMAN: Gentlemen, at this stage, I believe it is usual, if any one wishes to make any remark, or to put a question on the subject of the lecture, to invite him to do so. Captain Walker will have the advantage of the intelligent criticism that usually follows proposals that are laid before this Institution; and, possibly, he will be able to reply to any objection that may be made.

Colonel EVELYN: As no gentleman appears inclined to address the meeting, and as it is usual that some remarks should be made after the papers read at the Evening Meetings, I venture to rise, not as an opponent of Captain Walker, for I agree with him in principles if not in details, but to amplify a little his remarks. I am glad to hear that the Government intends to do away with the infantry shoulder-belt—a thing as thick as a trace, to which the cartouche box is suspended in a manner to allow the 60 rounds of ammunition it contains, to play the devil's tattoo in the soldier's rear whenever he attempts to double, annoying him, and destroying the cartridges. Captain Walker observed that our order was a great deal too close,—that 21 inches per file was not enough. I quite agree in this. Men cannot march elbow to elbow, except on a bowling-green; and when we consider that an attack now-a-days would usually be on an entrenched position, where the enemy would be under cover, and consequently not to be fired at, it is manifest that a line should be able to double, which it cannot do at the present close order of files. I am glad to say that this has, to a certain extent, been set to rights, for the new regulation is to give 24 inches per file, instead of 21. This is a step in the right direction, which might with advantage be increased. When we consider the probable great extent of the line of battle of the future, rendered necessary by the increased range of firearms, it seems likely that the fate of a battle may often depend on the relative speed with which the rival troops can get over four, five, or six miles of ground during the action. If the object of each General is to get a larger mass of men than his adversary to bear on a certain point, it seems that a line seven or eight miles in length can only be strengthened in any part by long marches from the Reserve; it would simply be a race between the two sides, to bring up men to reinforce a line several miles off. An extra ounce of weight, borne by a soldier, might be fatal. And this consideration applies to cavalry as well as infantry. The time has therefore arrived when we should discard shabracques, sabre-taches, bearskins, highland funeral plumes, and similar absurdities. It is probable that many Officers, young Officers especially, will disagree with me in this, because they think a soldier should take a pride in these things. But a soldier can be induced to take great pride in the devise of a button, or a little bit of lace. It is not ornament that is objectionable but cumbrous ornament. Why, then, load a soldier with things that are incumbrances, simply for the sake of effect?—effect that is always lost, for if you neglect the useful and appropriate, you cannot attain the ornamental. Take an infantry soldier of the present day in marching order, can any one say he is a particularly picturesque object, with his ugly hat, his short tunic, and broad shoulder-belt? Ladies, and some gentleman here, may never have seen the thing provided for British soldiers to carry water in during the march. It is a wooden barrel slung on a shoulder-belt. I do not know who invented it, but I should be



sorry to be that man. In addition to these, the soldier has a third belt across the shoulder for his haversack, a canvas bag, into which rain passes without hindrance. If he puts his bread into it, it becomes a sop, and a very dirty looking sop it is when he has to eat it. I have no hesitation in saying that the old cross-belts going over both shoulders, was a better arrangement than the present, for, at least, it was not lop-sided, whereas now the man is lop-sided. He carries 60 rounds of ammunition on the left shoulder, and is taught to carry his rifle on the same shoulder too. When I first joined the militia some years ago, we had a shoulder-belt and waist-belt as at present; but, in addition, we had a short strap about an inch long connecting the pouch to the waist-belt behind; so that the weight was supposed to be divided between the shoulder-belt two feet long, and another little strap about an inch long. Suspend any weight on the wall opposite, and try to divide it between a rope two feet long, and another an inch long; it will be found almost impossible to apportion the lengths so as to divide the weight. I think we ought to have nothing over the shoulders except the knapsack straps. The French soldiers are accustomed in a simple and efficient manner. They have only a waist-belt, which, however, ought to be a hip-belt, not a waist-belt; it ought to be below the waist, resting on the hips, the proper place to carry a weight. We have seen a mountebank supporting a six-pounder on his hips. As to yokes or braces across the shoulders for supporting the ammunition, they are quite unnecessary. The French have attached to the tunic at the left side, a little piece of cloth called a *suspensoir*. It laps over the belt, and is attached to a button above it. The belt rests on it, and it will support a great weight. I used to be very fond of shooting when I was at the Cape, and I have carried more than 100 bullets, an axe, a powder-horn, and many other things, all suspended round my waist. I have carried them on horseback and on foot, and have slept with them around me. I have carried them many more hours than a soldier on the march, without inconvenience, and even without the support of *suspensoirs*; far less can there be any necessity for a shoulder-belt. Our packs are badly placed, too high on the back, and they are, with the great coat, much too thick. The weight of the pack should be along the spine not across it. There used to be an old saying, "You must not interfere with the small of the back;" and that expression became stereotyped, till the authorities were afraid to have a pack that came down low on the back, so they made it very broad across the shoulders, and very narrow in the length of the man's back. It amounted, in fact, to placing a weight at the upper end of a flexible cane (to which the human spine may be compared), instead of distributing it vertically along it. The pack should extend along a man's back, and not across it. As the infantry soldier is a marching animal, I consider no part of his dress of more importance than his shoes. Wellington boots are an abomination either for cavalry or infantry. There is another stereotyped expression with reference to boots and shoes. People say, "you must support the ankle." Now what is the ankle? The ankle is a joint; it requires freedom, not support. Who ever heard of a man running a race requiring support to his ankles? he wears pumps. Whoever heard of opera dancers requiring support for their ankles? They require perfect freedom. There is nothing so good for marching or running, for jumping or climbing, as a low, broad shoe, with a good, close-fitting gaiter. It is a mistake to suppose that there is any inconvenience from the strap attached to the latter. I have spoken to French soldiers about it; and they say that the canvas gaiters are capital things, and that the strap that goes under the foot, lasts longer than the sole of the shoe. They do not, however, like their jambières,—hard leathern things which make the calves of their legs ache, and which would not be required at all if the gaiters were made longer. In Africa, when the Officers allow it, the men leave off wearing the jambières, and let down the legs of their knickerbockers to the ankles,—thus forming a light and easy marching costume. I hope that a few years will bring about a great improvement in the equipment of our cavalry and infantry; and that we shall no longer see the members of that excellent corps, the Guards, hopping about on a Sunday, with their trowsers dangling about the ankles, and balancing huge bearskins on their heads. The eye may become accustomed to anything; but if we were to see a bearskin cap for the first time, it would appear as fantastic and grotesque as anything



in Mr. Catlin's pictures of the North American Indians. I have no doubt, however, that the march of intellect will induce a great change in these respects.

Captain WALKER: I am glad to find that my views, in the main, have found so able a supporter. I am very much interested in what Colonel Evelyn has said. There is merely one point with reference to the weight-carrying power of the soldier that has not been adverted to, and that is, the disadvantage accruing from our present bore of rifle in connection with its conversion as a breech-loader. I do not wish to say a word now against the expediency of the conversion of the Enfield rifle into the Snider breech-loader. I believe, as a matter of temporary expediency, it was wise and prudent, and has, in the main, been attended with most satisfactory results. But I do think that that which constitutes a great drawback to it, should not be lost sight of—in connection with the weight carried by the soldier; inasmuch as, instead of the weight having, in these particulars, as to the rifle and ammunition, been decreased, it has actually been increased, to the extent of, at least, a pound in weight; whereas, on the continent, we find—in Prussia, for example—that that remarkable man, Herr Von Dreyse, the inventor of the needle-gun, is introducing a rifle which weighs  $3\frac{1}{2}$  lbs. less than the needle-gun with which the Prussian army won the battle of Sadowa. So likewise in France, we find that with the Chassepot rifle the soldier can absolutely, owing to the small bore of that arm, carry 90 rounds of ammunition for our 60, or 135 rounds for our 90. Now any one who has read what occurred at Inkermann—how at the supreme crisis of that desperate struggle, our Guards found themselves without a single round of ammunition—will appreciate the importance of this disparity in the number of rounds carried, weight for weight, by the French and English soldier respectively. I think it right to draw attention to this, although I cannot imagine that the Committee at present sitting at Woolwich, under Lord Spencer, will lose sight of it, for the day has gone by when it was held that it required a large bullet to “stop” a man, as if he were an elephant or other large game. It is now pretty generally admitted that where the human frame is concerned, but a small bullet, a mere bodkin's point as it were, is needed to produce the result required and place a man *hors de combat*; and it is acknowledged that a wounded man is a greater impediment than a dead one, inasmuch as the former demands the attention of two or more men:—

“Indeed in battle, better maim than kill—

“The dead may lie there, but the maim'd must still

“Cumber the living, and the ‘sick-list’ fill.”

Another point to which much weight has been attached in connection with the alteration of the dress of the army, was not referred to by me in my lecture. It has been asserted that the effect of dressing the British Army on the principle that a recruit is a man of ordinary common sense, who has adopted his calling from the same motives as those from which other men adopt theirs, would be “to diminish recruits in any agricultural district by 50 per cent., and in a town by 75 per cent. at the very least.” I cannot but think that such an estimate must be a great exaggeration, *even supposing* that the dress of the Army, when made more easy, more what you might call serviceable, was not compatible with good appearance. On another ground I meet this. Assuming, for the sake of argument, the correctness of this estimate, should we, I would ask, knowing what we now do as to the detriment which ensues to the health of the soldier by thus appealing to the predilection of half-educated men for a gaudy dress, employ this as a fulcrum or agency in recruiting? Should we try to entrap men as we do trout by the tinsel of an artificial bait, when we know that the wound imparted by the barbed hook has its counterpart in the subsequent injury which is inflicted to the man's health and strength, according to medical and other competent authorities—by the present system of dress and accoutrement? But I believe that this, in reality, is exaggerated in another way. I believe that in the present day of newspapers, of all but universal education, and practical good sense among the masses, your Thomas Aitkens—the John Noakes of the army, looks beneath and beyond the recruiting sergeant's scarlet tunic and “bunch of gay ribbands,” and inwardly, if not avowedly, asks how his dress, with its paraphernalia of thick leather stock, pipe-clayed

belts, pouches, and knapsack, is likely to affect the comfort of his future every-day life. But in point of fact, this whole line of argument, as to recruiting being injured by a reform of the soldier's dress, is demolished by what I have already maintained, viz., that a dress may be perfectly easy and serviceable, and at the same time perfectly compatible with good military effect and costume; and to say that you make a "rowdy" of a man by altering the cut of his coat, and giving him pockets, is as absurd as to say that a man out hunting ceases to be a gentleman because he wears a red coat shaped like a shooting jacket.

The CHAIRMAN: These are days of reform, and whether ultimately General Eyre's soldier, or the compound soldier recommended by Captain Walker, may find favour in the eyes of the military authorities, or whether any other pattern may be adopted, is a matter of uncertainty. We might have had more numerous expressions of opinion this evening, but I confess, I rather sympathise with the reserve of those gentlemen who keep their opinions for further consideration. I am disposed to do the same—to think upon what Captain Walker has said, before I express myself in more decided terms.

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#### APPENDIX.

(Copy of Letter from Messrs. Ellwood and Sons as to the comparative advantages of Cork and Felt as a material for a Military Head-dress.)

London, Blackfriars Road,  
July 2nd, 1867.

Dear Sir,

\* \* \* \* \*

We have for many years past made hats and helmets, both wholly of cork, and of cork in combination with other materials, and from experiments we have tried at various times we have found that cork by itself is totally useless as a head-dress, as it has not sufficient strength and toughness to withstand the most careful wear. Cork may be combined with cloth, by shellac and other gums so as to make a hard substance, similar to the body of a velvet hat; but we do not think that, by any means, the best material for a soldier's helmet. Cork may also be combined with cloth by means of India rubber, and it would then be comparatively soft, and might be doubled up or crushed without losing its original shape, exactly in the same manner as a mackintosh cloak may be, with precisely the same qualities as the mackintosh goods possess, viz., perfectly waterproof, not porous, to allow perspiration, to evaporate, and quite air-tight—all very useful qualities in some cases; but we do not for a moment suppose that any one would consider a mackintosh coat and trousers the best clothing for a soldier in a tropical climate, so we cannot understand why it should be the best material for a head-dress; and we all know how cork will keep the air out of a bottle of port wine, or in a bottle of soda-water, exactly the reverse in both cases of what is required with a soldier's helmet.

Felt is impervious to water, but not to air. It is a good non-conductor of heat (as proved by its being used for covering steam boilers and pipes), and when perfectly manufactured is not liable to be injured in any way by rain. Of course, a very low priced felt will not stand so much rain as a better one.

We could make *soft felt* helmets that could be folded into any form without losing their original shape. They could be used as pillows, and yet be quite impervious to rain.

We are, Dear Sir,  
Yours obediently,  
(Signed) J. ELLWOOD & SONS.

To Captain Walker,  
&c., &c.



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